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ABSTRACT

This instructional package is designed for visually impaired students in the vocational area of building maintenance and engineering. The twenty-eight learning modules are organized into six units: floor care, general maintenance tasks; restrooms; carpet care; power and hand tools; and cabinet construction. Each module, printed in large block type, includes these elements: a performance objective page telling what will be learned, what materials will be needed, and how the student will be evaluated; information and job step pages providing information needed to perform the activity, and detailing steps necessary to do the task. Illustrations are designed for the visually impaired. (This document is one of four sets of learning modules on building maintenance and engineering. The other three sets are written in formats designed for educable mentally impaired, low reader, and regular vocational students. The modules are part of a total set of over 1,300 written for different student populations. Dietetic assistant, small engine repair, medical assistant, and graphics are the other vocational fields covered.) (JH)

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ED158090

CAPITAL AREA CAREER CENTER
Ingham Intermediate School District
611 Hagadorn Road
Mason, Michigan 48854

TO: MULTIPLE LEARNING STRATEGIES PROJECT

BUILDING MAINTENANCE & ENGINEERING
Visually Impaired

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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CE 017 568

building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 001 date: 12/6/76 level: I

skill title: DUST MOPPING (RESILIENT & HARD FLOORS)

developed & written by: DWIGHT SMITH

visuals by: SANDRA STARNAMAN

WORD GUIDE

RESILIENT - A TERM APPLIED TO "SOFT" TILE FLOORS, SUCH AS ASPHALT, VINYL, OR VINYL ASBESTOS.

BENCH BRUSH - A SHORT-HANDLED BRUSH USED TO SWEEP DIRT FROM CORNERS, AND FROM PILES INTO A DUSTPAN.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO DUST MOP RESILIENT AND HARD FLOORS IN AREAS WITH CHAIRS, TABLES, AND DESKS.

AND IN ORDER TO DO THIS YOU WILL NEED:

DUST MOP

DUST PAN

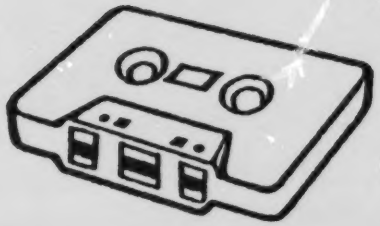
BENCH BRUSH

WASTE BASKET

PUTTY KNIFE

WE WILL KNOW THAT YOU CAN DO IT WHEN:

NO DUST, DIRT, OR PAPERS CAN BE SEEN ON THE FLOOR THAT YOU HAVE DUST MOPPED.



A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

WHAT IS A BENCH BRUSH?

A BENCH BRUSH IS _____.

A. A TOOTH BRUSH
B. A BRUSH AS LARGE AS A BENCH.
C. A SHORT-HANDLED BRUSH TO SWEEP DIRT FROM CORNERS, AND FROM PILES INTO A DUSTPAN.
D. A BRUSH MADE FROM AN OLD BENCH.

HOPE YOU PICKED "C".

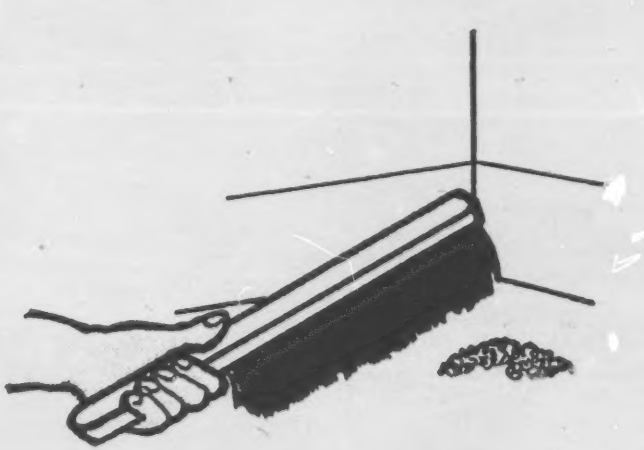
INFORMATION	MATERIALS	LOCATION OF MATERIALS
BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT. CHECK OFF THE EQUIPMENT YOU WILL NEED TO DUST MOP A FLOOR. WHEN YOU HAVE CHECKED THE EQUIPMENT YOU THINK YOU WILL NEED, SHOW YOUR CHECKLIST TO THE INSTRUCTOR. YOUR INSTRUCTOR WILL TELL YOU IF YOU ARE TO TURN TO THE NEXT PAGE OF THIS MODULE.	EQUIPMENT CHECKLIST	

JOB STEPS

1. GO TO THE EQUIPMENT STORAGE AREA. COLLECT THE EQUIPMENT THAT YOU WILL NEED. USE YOUR COMPLETED EQUIPMENT CHECKLIST TO BE SURE THAT YOU HAVE ALL THE EQUIPMENT.

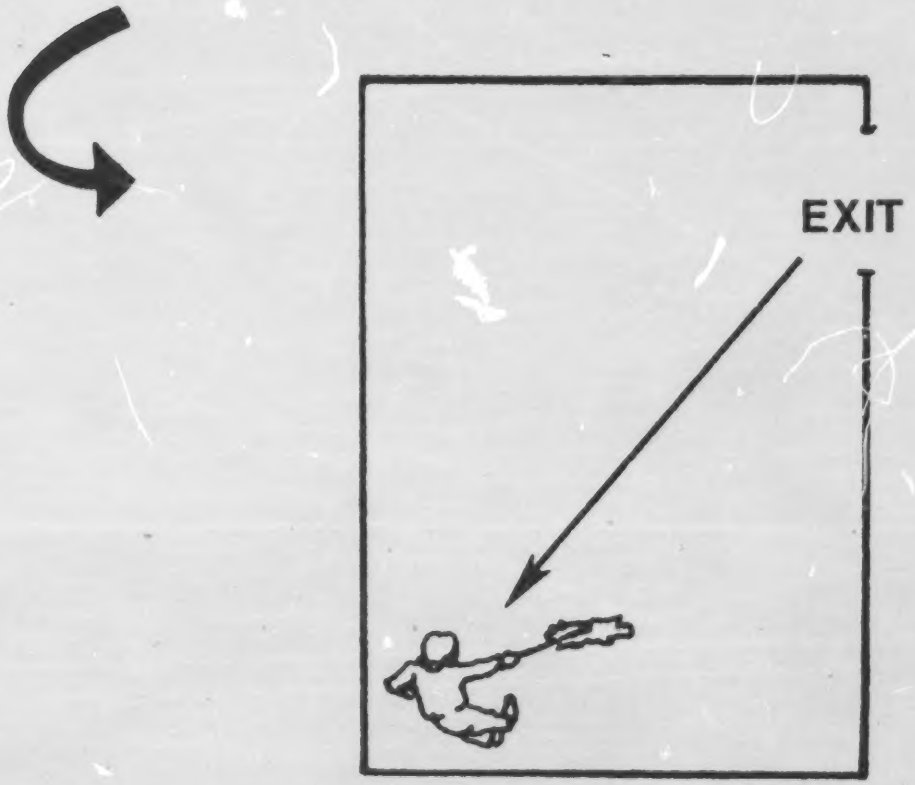
2. TAKE THE EQUIPMENT TO THE AREA TO BE DUST MOPPED.

3. USING THE BENCH BRUSH, DUST ANY REGISTERS, RADIATORS, OR CORNERS. PUSH THE DUST ON TO THE FLOOR.



JOB STEPS

4. BEGIN DUST MOPPING AT THE POINT FARTHEST AWAY FROM YOUR EXIT. DUST MOP TOWARD THE EXIT.



JOB STEPS

5. HOLD THE DUST MOP. PLACE YOUR FEET AT LEAST 18" APART SO THAT YOU HAVE GOOD BALANCE.

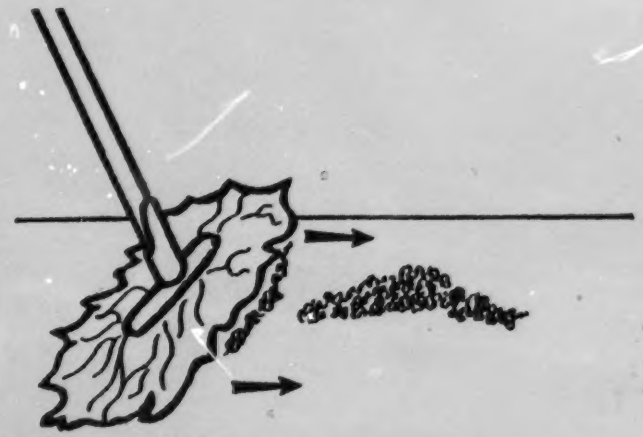
6. PLACE ONE HAND NEAR THE MIDDLE OF THE MOP HANDLE AND THE OTHER NEAR THE TOP. PLACE THE MOP SO THAT THE LONG SIDES OF THE MOP DO NOT FACE YOU.

JOB STEPS

7. PUSH THE DUST MOP TO ONE SIDE, THEN TURN YOUR WRISTS (AND THE DUST MOP) AND BRING THE DUST MOP TO YOUR OTHER SIDE. THE MOTION SHOULD FORM A FIGURE EIGHT. WITH THIS METHOD YOU WILL BE ABLE TO DUST UNDER CHAIRS, TABLES, AND DESKS.

8. USE YOUR PUTTY KNIFE TO REMOVE OBJECTS UR GUM STUCK TO THE FLOOR.

9. PUSH THE DIRT INTO A PILE.



JOB STEPS

10. USE YOUR BENCH BRUSH TO SWEEP DIRT ON TO THE DUSTPAN. EMPTY THE DUSTPAN INTO THE WASTE BASKET.

11. WHEN THE FLOOR HAS BEEN DUST MOPPED, RETURN ALL EQUIPMENT TO THE STORAGE AREA.

12. BE SURE TO SHAKE OR VACUUM THE DUST MOP.

building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 002 7 date: 12/76 level: 1

skill title: DAMP MOPPING

developed & written by: DWIGHT SMITH

visuals by: STARNAMAN

WORD GUIDE

WRINGER - USED TO SQUEEZE WATER FROM MOPS. FITS ON A BUCKET.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

TO DAMP MOP A FLOOR.

AND IN ORDER TO DO THIS YOU WILL NEED:

MOP — MOP BUCKET

WRINGER — MOP HANDLE

WE WILL KNOW THAT YOU CAN DO IT WHEN:

NO DIRT OR STAINS CAN BE SEEN ON THE FLOOR THAT YOU HAVE MOPPED.

A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

WHICH OF THE ABOVE IS A DAMP MOP?

WE HOPE YOU SAID "B".

INFORMATION	MATERIALS	LOCATION OF MATERIALS
THE FLOOR SHOULD BE DUST MOPPED BEFORE YOU BEGIN DAMP MOPPING. BY DAMP MOPPING, YOU WILL REMOVE ALL DIRT AND STAINS THAT ARE ON THE SURFACE OF THE FLOOR. BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT. CHECK OFF THE EQUIPMENT YOU WILL NEED TO DAMP MOP A FLOOR. WHEN YOU THINK THAT YOU HAVE CHECKED OFF ALL THE EQUIPMENT YOU WILL NEED, SHOW YOUR CHECKLIST TO YOUR INSTRUCTOR. YOUR INSTRUCTOR WILL TELL YOU IF YOU ARE TO TURN TO THE NEXT PAGE OF THE MODULE.	EQUIPMENT CHECKLIST	

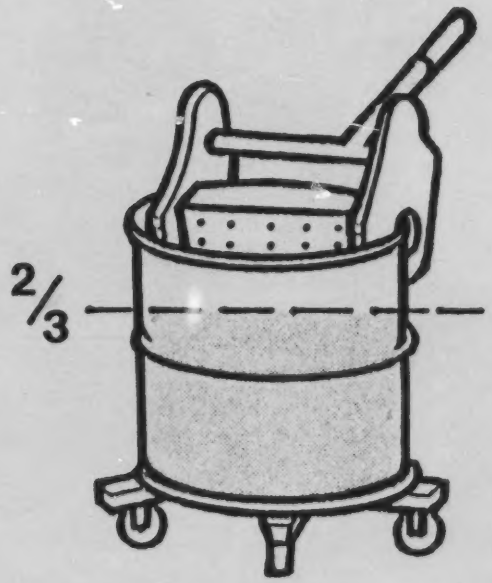
INFORMATION

****
* *
* CAUTION - NEVER LEAVE YOUR BUCKET IN *
* DOORWAYS OR AT THE BOTTOM OF STAIRS. *
* *
****

JOB STEPS

1. IF THE MOP HEAD AND MOP HANDLE ARE NOT ATTACHED, DO SO.

2. FILL ONE BUCKET 2/3 FULL WITH COLD WATER. ATTACH THE WRINGER TO THE BUCKET.



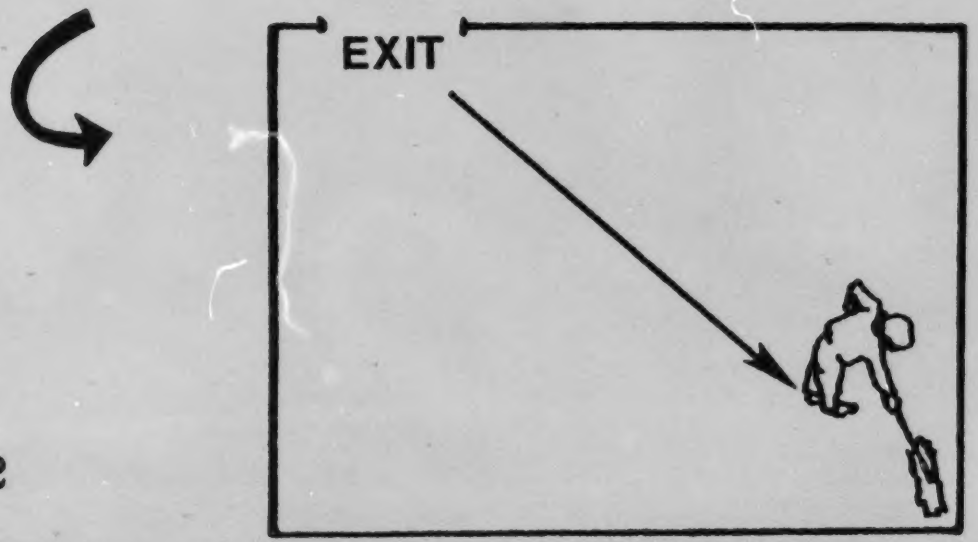
3. MOVE EQUIPMENT TO THE AREA TO BE DAMP MOPPED.

4. PLACE CLEAN MOP IN WATER AND DIP UP AND DOWN MANY TIMES.

JOB STEPS

5. PUT MOP IN WRINGER AND SQUEEZE VERY DRY.

6. BEGIN MOPPING AT THE POINT FARTHEST FROM YOUR EXIT.



JOB STEPS

7. PLACE ONE HAND NEAR THE MIDDLE OF THE HANDLE AND THE OTHER NEAR THE TOP. SWING THE MOP FROM SIDE TO SIDE IN A FIGURE EIGHT MOTION.

8. ALWAYS MOP BACKWARDS TOWARD YOUR EXIT TO AVOID WALKING ON WET FLOORS.

JOB STEPS

9. WHEN MOPPING UNDER TABLES AND CHAIRS, PUSH AND PULL THE MOP.

10. WHEN YOUR MOP IS DIRTY, DIP IT INTO THE WATER AND WRING IT OUT.

11. WHEN YOU ARE DONE MOPPING, RINSE THE MOP, WRING IT OUT, AND HANG IT UP TO DRY. DUMP THE MOP BUCKET AND RINSE IT.

building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 003 7 date: 12/76 level:

skill title: WET MOPPING TO REMOVE DIRT AND GREASE

developed & written by: DWIGHT SMITH

visuals by: SANDRA STARNAMAN

WORD GUIDE

NEUTRAL SOAP - PLAIN DETERGENT SOAP THAT CONTAINS NO ACIDS.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO WET MOP GREASE AND DIRT FROM A FLOOR.

AND IN ORDER TO DO THIS YOU WILL NEED:

MOP AND HANDLE

BUCKET AND WRINGER

NEUTRAL SOAP

WE WILL KNOW THAT YOU CAN DO IT WHEN:

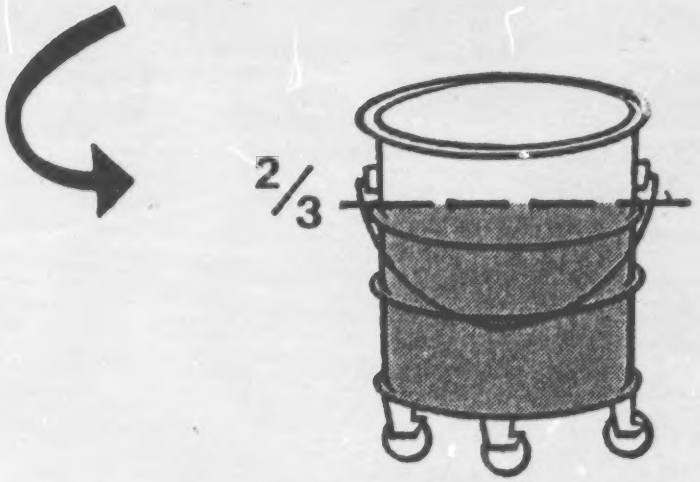
YOU HAVE CLEANED THE GREASE AND DIRT FROM A FLOOR.

A TAPE OF THIS MODULE IS AVAILABLE

JOB STEPS

1. IF YOU DO NOT REMEMBER HOW TO MOP, RETURN TO THE MODULE ON DAMP MOPPING. (MOD 2201 01 002 7).

2. FILL ONE BUCKET 2/3 FULL WITH COLD WATER.



3. ADD NEUTRAL SOAP TO THE BUCKET OF COLD WATER. ASK YOUR INSTRUCTOR TO TELL YOU HOW MUCH SOAP TO ADD.

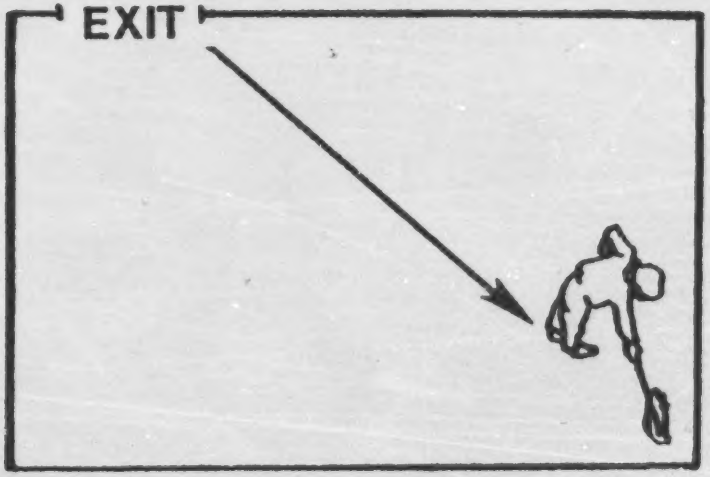
WORD GUIDE

HIGH TRAFFIC AREA - DOORWAYS, CORNERS, AND AREAS THAT ARE WALKED ON OFTEN.

JOB STEPS

4. MOVE YOUR EQUIPMENT TO THE WORK AREA.

5. BEGIN MOPPING AT THE FARTHEST POINT FROM YOUR EXIT.



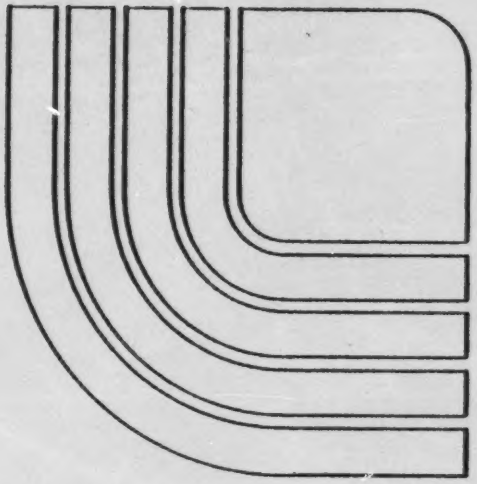
6. WHEN MOPPING HIGH TRAFFIC AREAS YOU MAY NEED TO GO OVER THEM A SECOND TIME TO REMOVE ALL THE DIRT AND GREASE.

TURN PAGE →

JOB STEPS

7. BE CAREFUL NOT TO SPLASH WALLS OR FURNITURE.

8. WHEN FINISHED, CLEAN YOUR EQUIPMENT ACCORDING TO WHAT YOU LEARNED IN THE MODULE ON DAMP MOPPING (MODULE 2201 01 002 7).



building maintenance & engineering

unit: _____

capital area career center

module: 2201 01 004 7 date: 12/76 level: ____

skill title: WET MOPPING TO DISINFECT

_____

developed & written by: DWIGHT SMITH

visuals by: SANDRA STARNAMAN

1-4

2

WORD GUIDE

GERMICIDAL DISINFECTANT - A SOLUTION THAT KILLS GERMS

DISINFECTANT - TO KILL GERMS.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

TO DISINFECT A RESTROOM FLOOR BY WET MOPPING.

AND IN ORDER TO DO THIS YOU WILL NEED:

MOP AND HANDLE

BUCKET

GERMICIDAL DISINFECTANT

WE WILL KNOW THAT YOU CAN DO IT WHEN:

YOU HAVE MOPPED A RESTROOM FLOOR WITH DISINFECTANT.

INFORMATION

A TAPE OF THIS MODULE IS AVAILABLE

A DISINFECTANT IS _____.

A. A TOOTHACHE
B. PART OF A MOP
C. SOMETHING TO PUT ON HOT DOGS
D. A SOLUTION THAT KILLS GERMS

HOPE YOU PICKED "D".

JOB STEPS

1. FILL A BUCKET 2/3 FULL WITH COLD WATER.

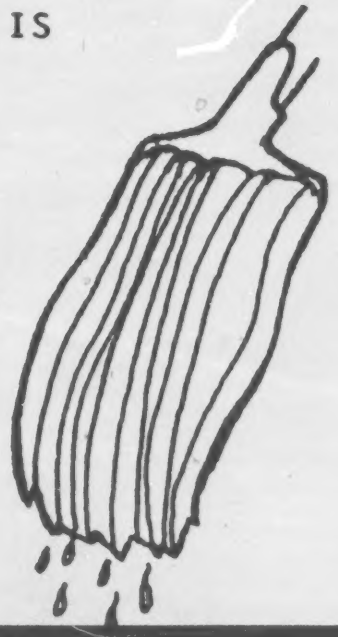
2. ACCORDING TO THE INSTRUCTIONS ON THE DISINFECTANT, ADD THE DISINFECTANT TO THE WATER.

3. MOVE THE EQUIPMENT TO THE RESTROOM TO BE DISINFECTED.

4. BEGIN MOPPING IN AN AREA FARTHEST AWAY FROM THE EXIT.

5. BEGIN MOPPING ACCORDING TO THE MODULE ON DAMP MOPPING. BE SURE THAT YOUR MOP IS VERY WET WITH THE DISINFECTANT AND WATER.

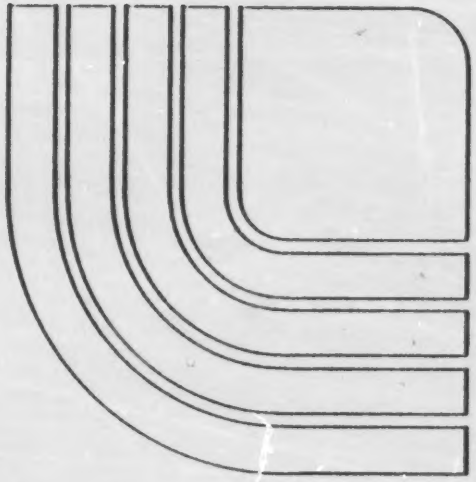
TURN PAGE →



JOB STEPS

6. BE SURE TO RUN YOU MOP ALONG THE CORNERS AND EDGES OF THE WALL.

7. WHEN FINISHED, CAREFULLY CLEAN ALL EQUIPMENT AND RETURN TO THE STORAGE AREA.



building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 005 7 date: 10/77 level:

skill title: FLOOR STRIPPING (RESILIENT FLOORS)

developed & written by: JACK HELDER

visuals by: SANDRA STARNAMAN

WORD GUIDE

STRIP - TO REMOVE OLD WAX FROM A FLOOR.

RESILIENT - A TERM APPLIED TO "SOFT" TILE FLOORS, SUCH AS ASPHALT, VINYL, OR VINYL ASBESTOS.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

TO STRIP A RESILIENT FLOOR, BY REMOVING ALL OLD WAX, DIRT, AND BLACK MARKS.

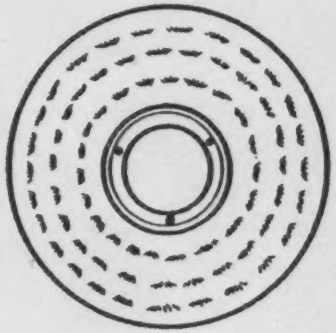
AND IN ORDER TO DO THIS YOU WILL NEED:

3 MOP BUCKETS	3 WET MOPS	PUTTY KNIFE
3 WRINGERS	WAX REMOVER	PENCIL AND PAPER

1-

3

. . . YOU WILL NEED:



SCRUB BRUSH

RUBBER OVERSHOES

WOOL KICK PADS

STRIPPING PAD

BUFFING MACHINE

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE WATCHED AND LISTENED TO THE SLIDE TAPE, AND THEN HAVE COMPLETED THE JOB STEPS BY STRIPPING A RESILIENT FLOOR.

A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION	MATERIALS	LOCATION OF MATERIALS
WHY DO YOU STRIP A RESILIENT FLOOR? BECAUSE OLD WAX SLOWLY BECOMES DULL, DIRTY, AND COVERED WITH BLACK MARKS FROM SHOES. DUSTING AND MOPPING WILL NOT CLEAN THIS OLD WAX. A NEW COAT OF WAX WILL JUST MAKE THE FLOOR HARDER TO CLEAN. BY STRIPPING OFF THE OLD WAX AND SCRUBBING OFF THE BLACK MARKS, YOU CAN PREPARE A FLOOR FOR A FRESH COAT OF WAX.		

INFORMATION	MATERIALS	LOCATION OF MATERIALS
NOW DO WATCH AND LISTEN TO THE SLIDE TAPE FOR MODULE 2201 01 005 7. YOU WILL BE TOLD HOW TO STRIP A RESILIENT FLOOR. BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT. WHEN YOU HAVE FINISHED THE SLIDE TAPE, CONTINUE THIS MODULE BY TURNING TO THE NEXT PAGE.	2201 01 005 7 SLIDE TAPE EQUIPMENT CHECKLIST	

1-9

WHAT IS A RESILIENT FLOOR?

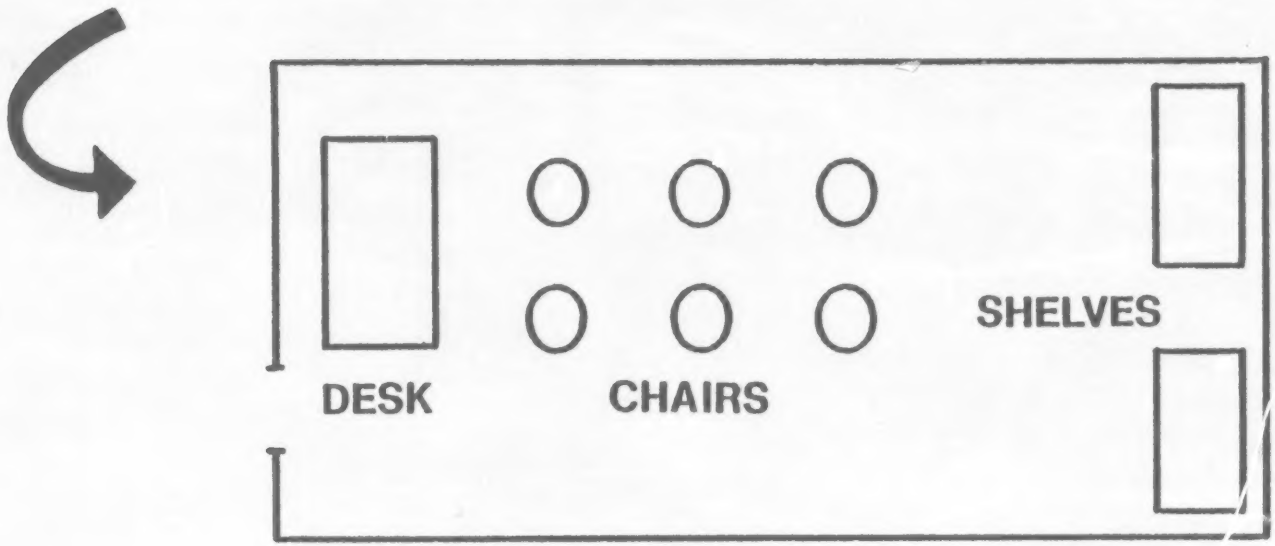
A RESILIENT FLOOR IS A FLOOR MADE OF _____

A. BRICKS
B. OLD WAX, DIRT AND BLACK MARKS
C. BANANA PEELS
D. "SOFT" TILES, SUCH AS ASPHALT, VINYL, OR VINYL ASBESTOS

HOPE YOU PICKED "D".

JOB STEPS

1. MAKE A DIAGRAM OF ALL PRESENT FURNITURE LOCATIONS.

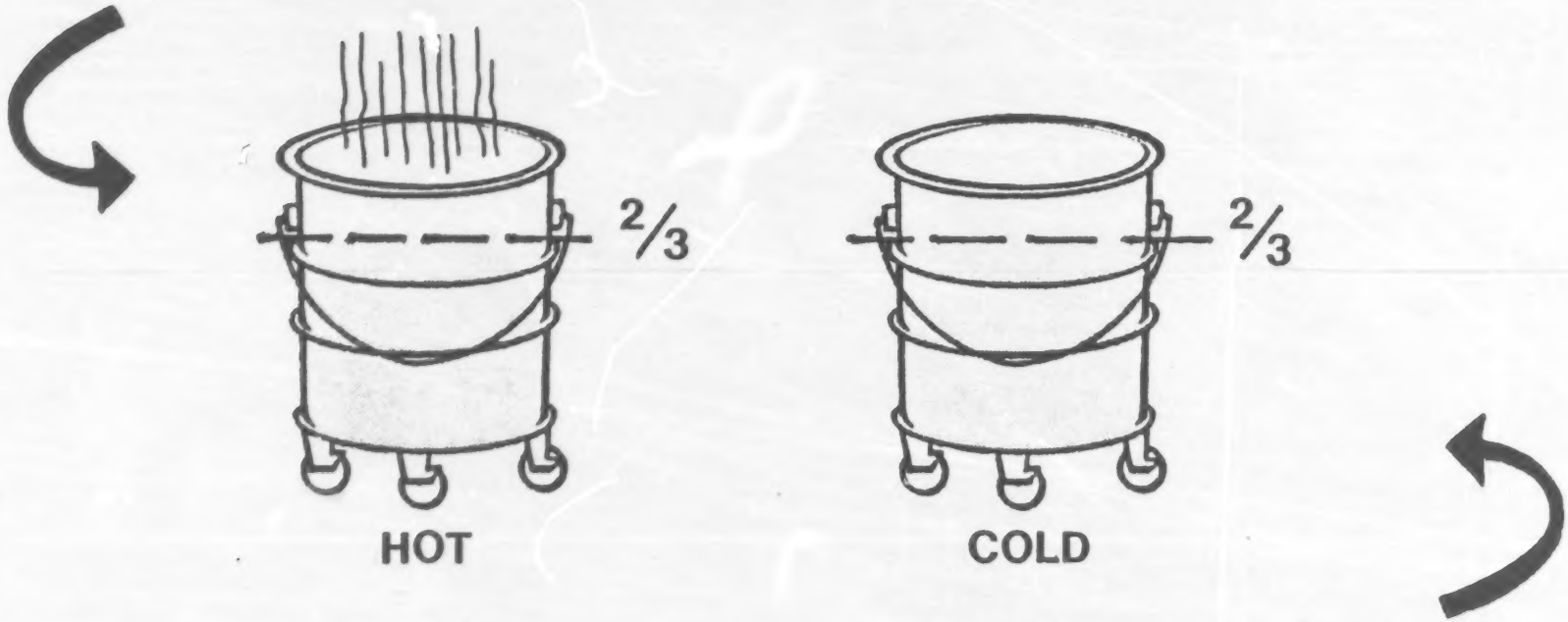


2. MOVE THE FURNITURE AWAY FROM THE AREA TO BE STRIPPED.

3. DUST THE AREA TO BE STRIPPED -- JUST AS YOU LEARNED IN MODULE 2201 01 001 7.

JOB STEPS

4. FILL ONE BUCKET 2/3 FULL WITH WARM OR HOT WATER.



5. FILL THE SECOND BUCKET 2/3 FULL WITH COLD WATER.

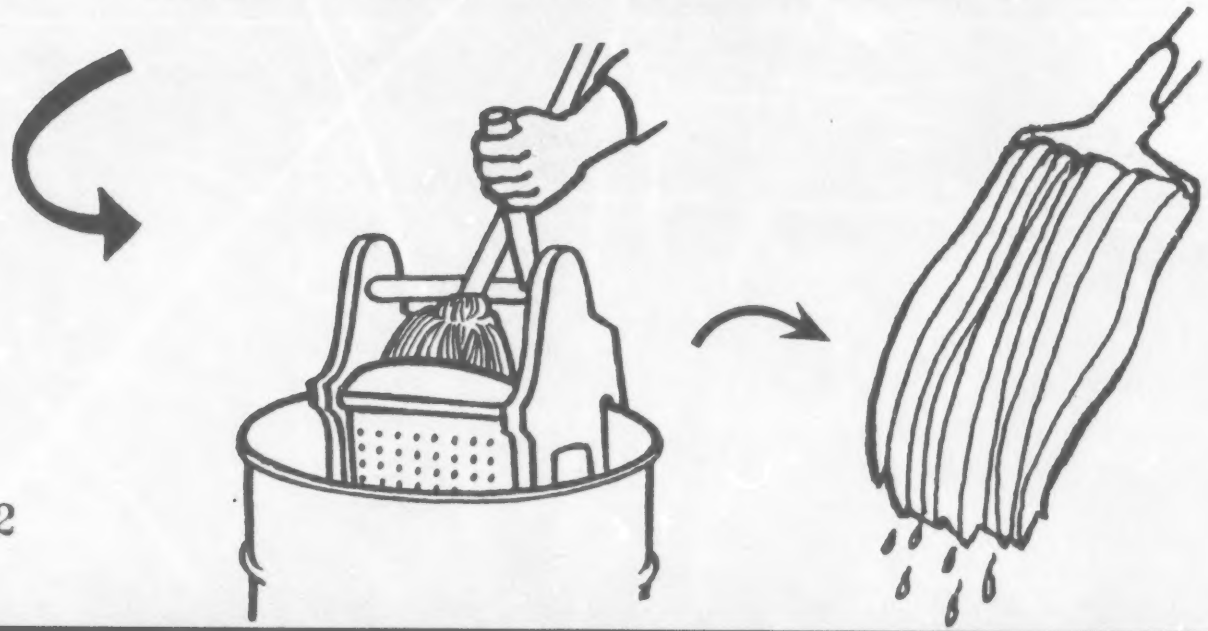
6. WITH YOUR INSTRUCTOR'S HELP, ADD WAX REMOVER TO THE HOT WATER BUCKET.

JOB STEPS

7. MOVE ALL EQUIPMENT TO THE AREA TO BE STRIPPED. USE THE EQUIPMENT CHECKLIST TO BE SURE YOU HAVE EVERYTHING YOU NEED.

8. PUT A CLEAN MOP INTO THE BUCKET OF HOT WATER AND WAX REMOVER SOLUTION. DIP THE MOP UP AND DOWN MANY TIMES IN THE SOLUTION.

9. PLACE THE MOP IN THE WRINGER. PUSH THE HANDLE DOWN LIGHTLY. LEAVE THE MOP VERY WET.

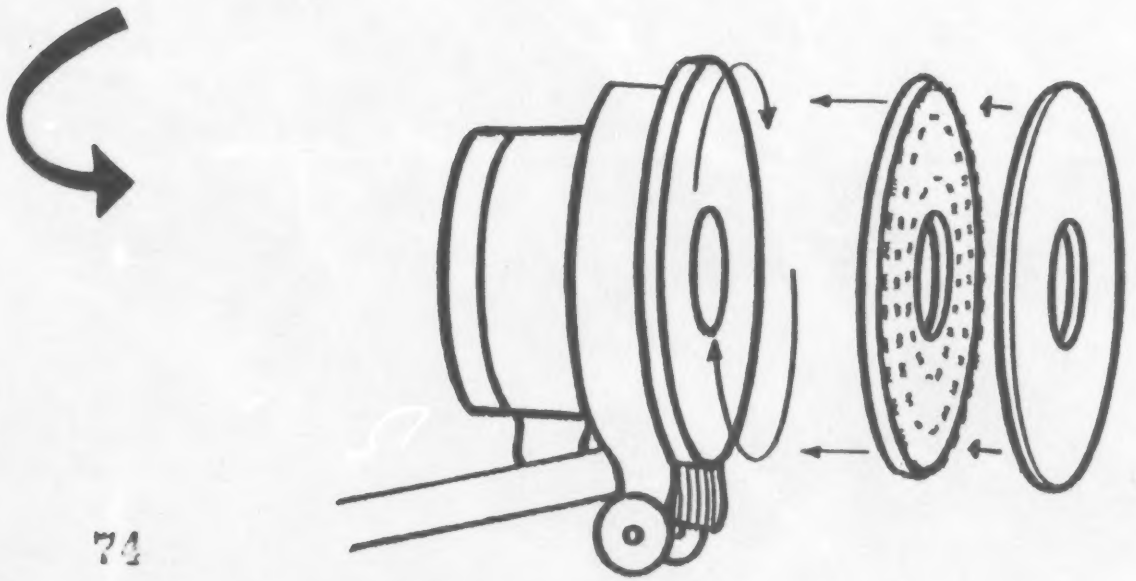


JOB STEPS

10. MOP THE AREA -- JUST AS YOU LEARNED IN MODULE 2201 01 003 7. LEAVE THE FLOOR VERY WET WITH THE SOLUTION. USE A PUTTY KNIFE TO REMOVE ANYTHING STUCK ON THE FLOOR.

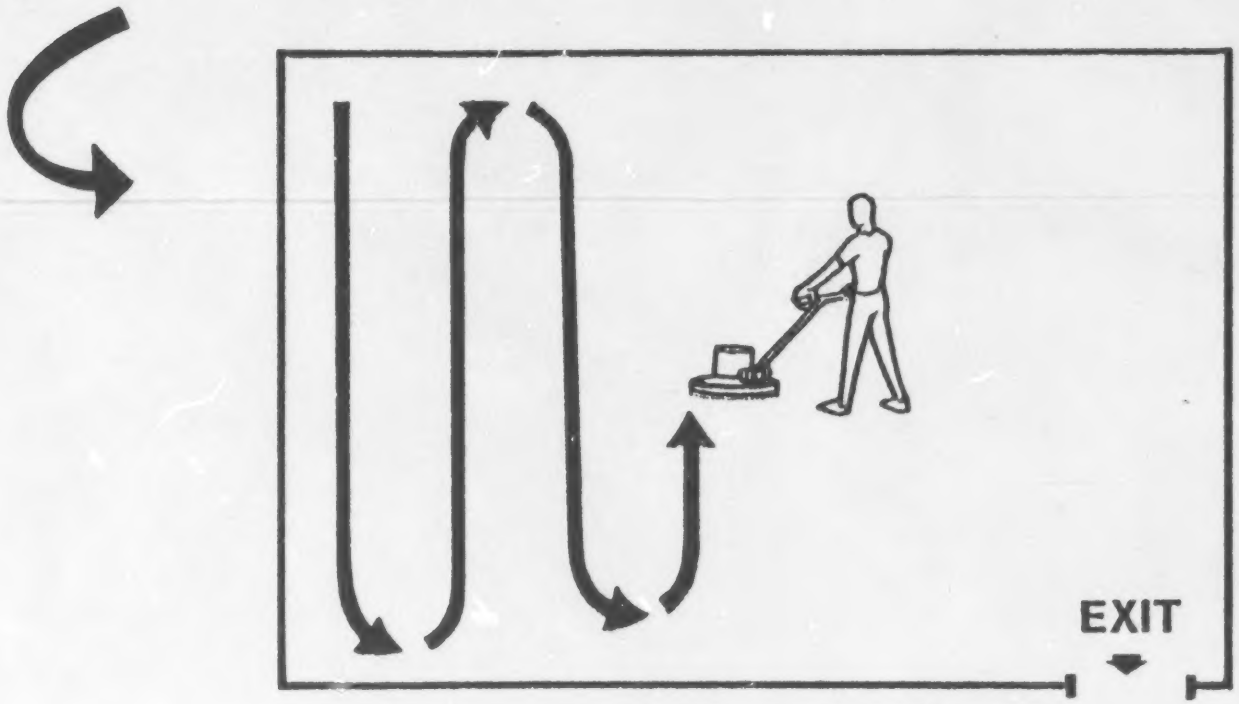
11. ALLOW THE SOLUTION TO REMAIN ON THE FLOOR FOR ONLY 5 MINUTES. THE FLOOR MUST BE DAMP DURING STRIPPING.

12. ATTACH THE STRIPPING PAD TO THE SCRUB BRUSH. ATTACH THEM TO THE BUFFING MACHINE.



JOB STEPS

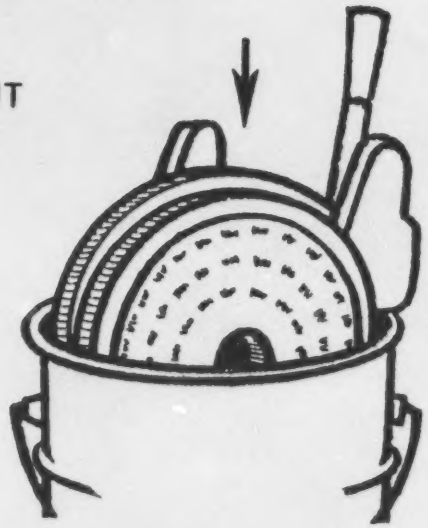
13. MOVE THE FLOOR MACHINE TO A POINT FARTHEST FROM THE EXIT AND BEGIN STRIPPING OPERATION.



14. OPERATE THE MACHINE SLOWLY FROM SIDE TO SIDE UNTIL THE ENTIRE AREA HAS BEEN STRIPPED.

JOB STEPS

15. REMOVE THE SCRUB BRUSH AND PUT THE BRUSH ON THE BUCKET WITH SOLUTION IN IT. THE BRUSH AND PAD MUST DRIP INTO THE BUCKET.



16. USING THE SECOND MOP, AND SECOND BUCKET OF WATER, WET MOP THE ENTIRE AREA. WET MOP UNTIL ALL SOLUTION AND DIRT ARE REMOVED.

17. FILL THE THIRD BUCKET 2/3 FULL WITH COLD WATER.

18. USING A CLEAN MOP AND THE COLD WATER, WET MOP THE ENTIRE STRIPPED FLOOR.

19. WHEN THE FLOOR IS DRY, BRUSH YOUR HAND OVER A SPOT. IF THERE IS A WHITE DUST ON YOUR FINGERS, RE-MOP THE AREA.

TURN PAGE →

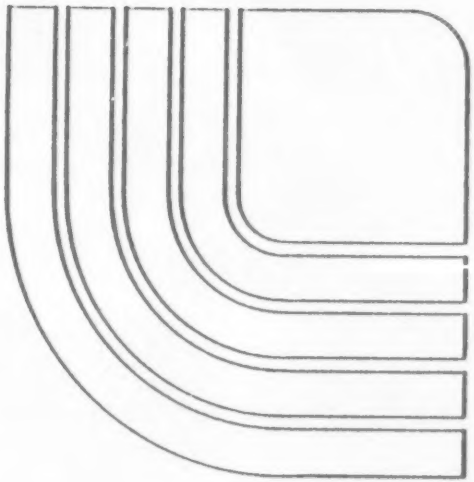
JOB STEPS

20. DAMP MOP THE ENTIRE AREA -- JUST AS YOU LEARNED IN MODULE 2201 01 002 7.

21. WHEN THE FLOOR IS DRY, INSPECT THE ENTIRE FLOOR TO BE SURE ALL OLD WAX, DIRT, AND BLACK MARKS HAVE BEEN REMOVED.

22, WIPE ANY SPLATTER MARKS FROM BASEBOARDS, WALLS OR FURNITURE.

23. RETURN ALL MATERIALS AND TOOLS. BE SURE ALL TOOLS ARE CLEANED.



building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 006 7 date: 12/76 level:

skill title: WAXING FLOORS

developed & written by: DWIGHT SMITH

visuals by: SANDRA STARNAMAN

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO WAX A FLOOR.

AND IN ORDER TO DO THIS YOU WILL NEED:

A CLEAN MOP AND HANDLE

BUCKET

WRINGER

FLOOR WAX

WE WILL KNOW THAT YOU CAN DO IT WHEN:

THE FLOOR YOU HAVE WAXED HAS AN EVEN COAT OF WAX, WITH NO STREAKS, DULL SPOTS OR BUBBLES.

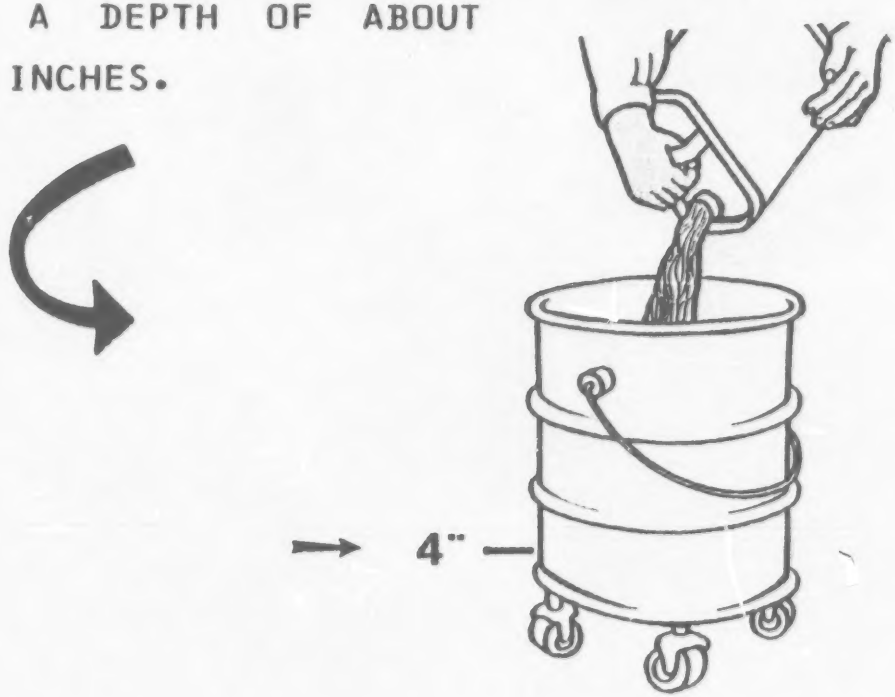
A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION	MATERIALS	LOCATION OF MATERIALS
BEFORE BEGINNING THE JOB STEPS FOR WAXING A FLOOR, YOU SHOULD BE SURE THAT THE FLOOR HAS BEEN PREPARED. ACCORDING TO THE CONDITION OF THE FLOOR, IT MAY HAVE TO BE DAMP MOPPED, WET MOPPED, OR EVEN STRIPPED OF OLD WAX. REVIEW MODULES 2201 01 002 7, 2201 01 003 7, AND 2201 01 005 7 IF YOU DO NOT REMEMBER HOW TO CLEAN A HARD FLOOR.		

JOB STEPS

1. GATHER ALL THE EQUIPMENT YOU WILL NEED TO WAX A FLOOR.

2. POUR WAX INTO YOUR MOP BUCKET TO A DEPTH OF ABOUT 4 INCHES.



3. MOVE ALL EQUIPMENT TO YOUR WORK AREA.

JOB STEPS

4. MOVE ALL FURNITURE OUT OF THE WORK AREA. BE CAREFUL NOT TO BANG WALLS OR BUMP FURNITURE.

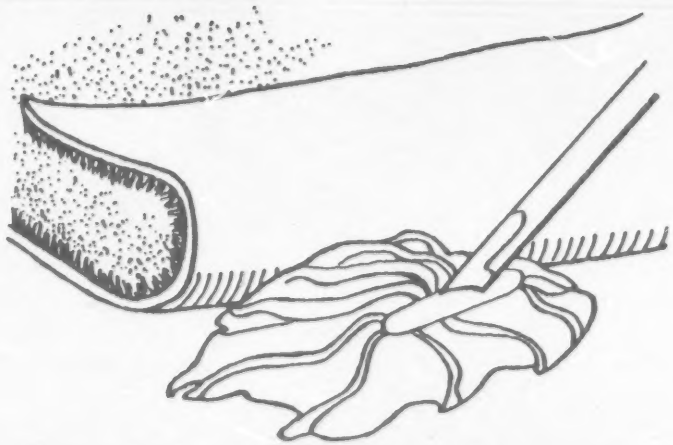
5. PLACE MOP INTO THE WAX BUCKET. THEN WRING OUT THE DRIPPING MOP, PUSHING DOWN THE WRINGER HANDLE ABOUT 1/2 WAY. AFTER YOU HAVE SQUEEZED SOME OF THE WAX OUT, THE MOP SHOULD NOT DRIP WAX.

6. BEGIN WAXING AT A POINT FARTHEST FROM YOUR EXIT.

JOB STEPS

7. FIRST WAX ALONG THE OUTER EDGE OF AN AREA AND AROUND ANY FURNITURE THAT REMAINS. BE CAREFUL NOT TO SPLASH WAX.

8. LIFT UP AND FOLD BACK ANY CARPETS OR RUGS THAT WERE NOT REMOVED. WAX AROUND THE CARPETS OR RUGS.



TURN PAGE →

JOB STEPS

9. APPLY THE WAX TO LARGER SURFACE AREAS BY USING THE FIGURE EIGHT MOTION THAT YOU LEARNED IN THE MODULE ON DAMP MOPPING.

10. PLACE MOP IN THE WAX BUCKET AND WRING OUT AS OFTEN AS YOU NEED IN ORDER TO APPLY AN EVEN AMOUNT OF WAX TO THE FLOOR.

11. IF A SECOND COAT OF WAX IS NEEDED, DO NOT APPLY AROUND OUTER EDGE AS YOU DID IN STEP 7.

12. RETURN ALL EQUIPMENT TO THE STORAGE AREA.

13. RINSE OUT YOUR MOP AND BUCKET WITH WARM WATER. BE SURE YOUR MOP IS AS DRY AS POSSIBLE AFTER WRINGING.

14. WHEN WAX IS DRY, REPLACE RUGS AND FURNITURE.

building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 007 7 date: 12/76 level: I

skill title: SPRAY BUFFING

developed & written by: DWIGHT SMITH

visuals by:

WORD GUIDE

GLOSS - BRIGHT POLISH OR SHINE.

SCUFF - SHOEMARKS OR FURNITURE SCRATCHES.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO SPRAY BUFF A FLOOR.

IN ORDER TO DO THIS YOU WILL NEED:

FLOOR BUFFER
SPRAY ATTACHMENT
SPRAY BOTTLE
FLOOR WAX
STEEL WOOL KICK PAD
BUFFING PAD

WE WILL KNOW YOU CAN DO IT WHEN:

HIGH TRAFFIC AREAS WILL BE BUFFED TO THEIR ORIGINAL GLOSS, AND SCUFF MARKS AND BLACK MARKS HAVE BEEN REMOVED.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

IN THIS MODULE YOU WILL USE THE FLOOR BUFFER TO SPRAY BUFF A FLOOR.

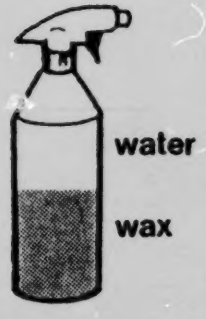
SOMETIMES YOU MAY ALSO SPRAY BUFF A FLOOR USING AN AUTOMATIC FLOOR MACHINE. ASK YOUR INSTRUCTOR WHEN IT IS BETTER TO USE THE FLOOR BUFFER.

JOB STEPS

1. GET ALL THE EQUIPMENT YOU WILL NEED. USE YOUR EQUIPMENT CHECKLIST.

2. IF YOU WILL BE USING A SPRAY ATTACHMENT FOR THE FLOOR BUFFER, FILL THE BOTTLE HALF WITH WATER AND HALF WITH WAX.

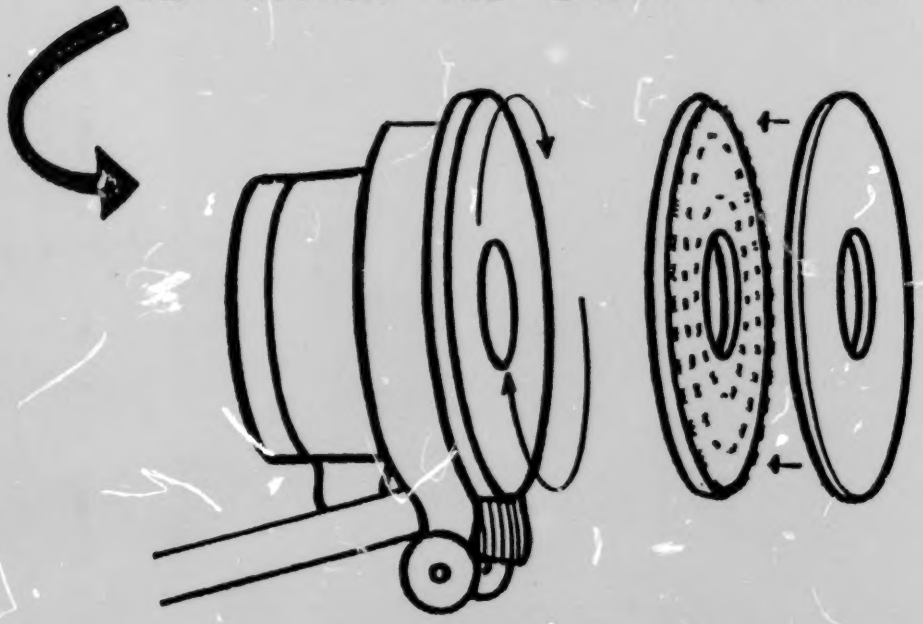
   IF YOU WILL BE USING A SPRAY BOTTLE, FILL HALF WITH WATER AND HALF WITH WAX.



3. MOVE EQUIPMENT TO THE WORK AREA.

JOB STEPS

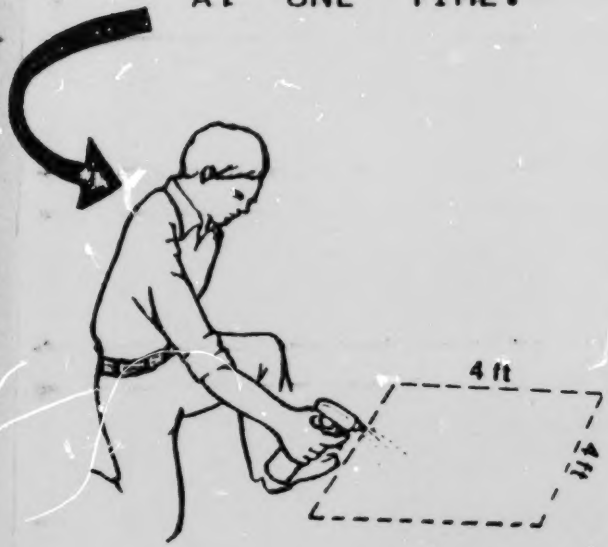
4. ATTACH THE SPRAY BUFF PAD TO THE BRUSH AND ATTACH THE BRUSH TO THE MACHINE.



5. SET THE BRUSH PRESSURE AT THE NORMAL POSITION.

JOB STEPS

6. SPRAY A FINE MOST OF THE WATER AND WAX SOLUTION ON THE AREA TO BE BUFFED. COVER AN AREA NO LARGER THAN 4 FEET BY 4 FEET AT ONE TIME.



7. IF THE FLOOR HAS BLACK MARKS, REMOVE THEM WITH THE STEEL WOOL KICK PAD. THEN BUFF OVER IT.

JOB STEPS

8. CHANGE YOUR PAD OVER FROM ONE SIDE TO THE OTHER WHEN THE BOTTOM GETS DIRTY.

9. BUFF THE AREA DRY WITH THE FLOOR BUFFER. DO THIS UNTIL THE ENTIRE FLOOR IS SPRAY BUFFED.

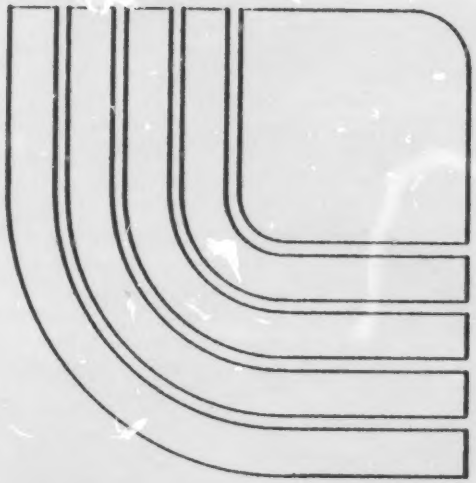
10. DUST MOP THE AREA YOU HAVE BUFFED, ACCORDING TO MODULE 2201 01 001 ON DUST MOPPING.

11. RETURN ALL EQUIPMENT TO THE STORAGE AREA.

12. RINSE OUT THE SPRAY BOTTLE, OR THE SPRAY ATTACHMENT.

TURN PAGE →

13. IF THE BUFFING PADS ARE VERY DIRTY, WASH THEM OUT IN HOT WATER. HAND THEM TO DRY OVERNIGHT.



building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 008 7 date: 12/6/76 level: ____

skill title: SEALING A FLOOR (RESILIENT FLOORS)

developed & written by: DWIGHT SMITH

visuals by: ____

WORD GUIDE

SEALER - A SOLUTION USED TO PROTECT A RESILIENT FLOOR

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO SEAL A RESILIENT FLOOR.

AND IN ORDER TO DO THIS YOU WILL BE GIVEN:

CLEAN MOP AND HANDLE
MOP BUCKET
WRINGER
FLOOR SEALER

WE WILL KNOW THAT YOU CAN DO IT WHEN:

YOU HAVE APPLIED AN EVEN COAT OF SEAL THAT CONTAINS NO STREAKS OR BUBBLES.

A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION	MATERIALS	LOCATION OF MATERIALS
BEFORE APPLYING SEALER TO THE FLOOR, YOU MUST STRIP AND RINSE THE FLOOR AS SHOWN IN MODULE 2201 01 005 7. IF YOU DO NOT REMEMBER HOW TO STRIP A FLOOR, WATCH THE SLIDE TAPE FOR MODULE 2201 01 005 7.		

JOB STEPS

1. SELECT THE EQUIPMENT YOU WILL NEED.

2. POUR ABOUT 4 INCHES OF SEALER INTO YOUR MOP BUCKET.

3. TAKE YOUR EQUIPMENT TO THE WORK AREA.

4. BEGIN WORK AT THE FARTHEST POINT FROM YOUR EXIT.

JOB STEPS

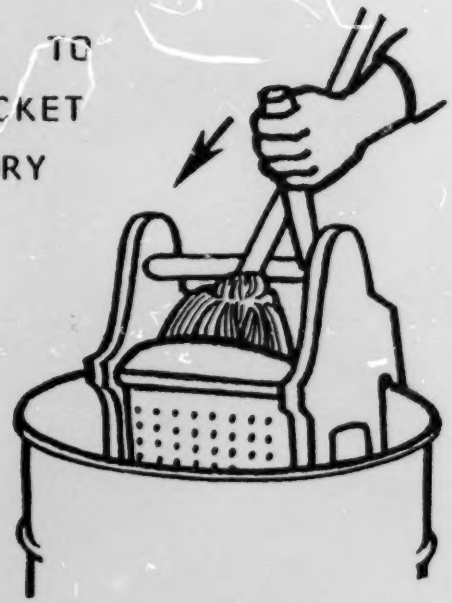
5. DIP YOUR MOP UP AND DOWN IN THE SEALER UNTIL YOU ARE SURE IT IS FULLY WET.

6. WRING OUT A SMALL AMOUNT OF THE SEALER.

7. APPLY LOTS OF SEALER TO THE WORK AREA. DO NOT WORK ON AN AREA LARGER THAN 25 SQUARE FEET AT ONE TIME. ASK YOUR INSTRUCTOR IF YOU DO NOT KNOW HOW TO MEASURE 25 SQUARE FEET.

JOB STEPS

8. AFTER YOU HAVE APPLIED SEALER TO THE AREA, RETURN TO YOUR BUCKET AND WRING OUT YOUR MOP AS DRY AS POSSIBLE.

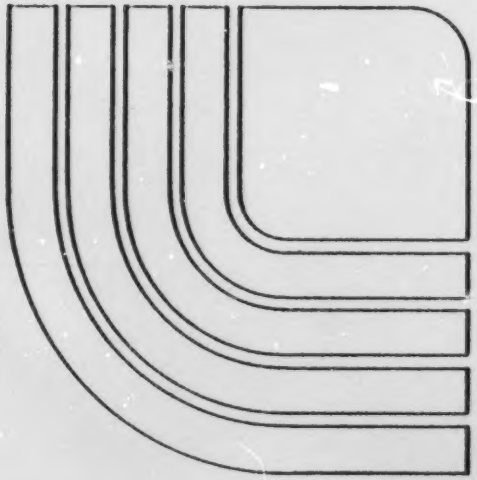


9. USING YOUR MOP, PICK UP THE SEALER THAT REMAINS ON THE FLOOR.

10. REPEAT STEPS 6 THROUGH 9 UNTIL YOU HAVE COVERED AN ENTIRE FLOOR.

11. RETURN EQUIPMENT TO THE STORAGE AREA.

12. RINSE OUT YOUR MOP AND BUCKET IN WARM WATER. AFTER RINSING YOUR MOP, SQUEEZE IT DRY AND HANG IT UP.



building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 011 7 date: 12/76 level:

skill title: OPERATION AND USE OF WET VACUUM

developed & written by: LESTER SCHICK

visuals by: BILL DRAPER

WORD GUIDE

SOLUTION - A MIXTURE OF CHEMICALS IN A LIQUID SUCH AS WATER OR AMONIA.

WAND - A LONG HANDLE ATTACHED TO A SWEEPER HOSE.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

TO REMOVE SOLUTIONS FROM FLOORS USING A WET VACUUM.

AND IN ORDER TO DO THIS YOU WILL NEED:

WET VACUUM

VACUUM HOSE

WAND

BUCKET

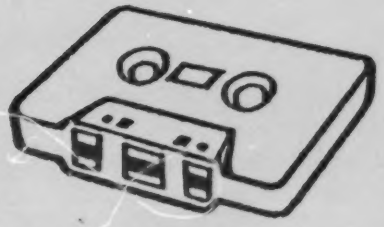
WRINGER

MOP

FLOOR TOOL ATTACHMENT

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE WET VACUUMED A FLOOR SO THAT NO SOLUTION IS LEFT.



A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

<u>WHY</u> DO YOU WET VACUUM A FLOOR?

BECAUSE IN CLEANING FLOORS YOU WILL OFTEN USE LIQUIDS SUCH AS WATER OR CLEANING SOLUTIONS TO REMOVE ALL THE DIRT. IN ORDER TO REMOVE THESE LIQUIDS FROM THE FLOOR, A WET VACUUM IS USED.

A WET VACUUM REMOVES LIQUIDS FROM FLOORS MORE QUICKLY THAN OTHER METHODS.

BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT.

125 AND 126

WHAT IS A WET VACUUM?

A WET VACUUM IS _____.

A. A VERY FAST CAR.

B. A TOOL USED FOR SPRAYING WATER.

C. A MACHINE USED IN PAINTING A FLOOR.

D. A MACHINE USED TO COLLECT LIQUID FROM A FLOOR.

HOPE YOU PICKED "D".

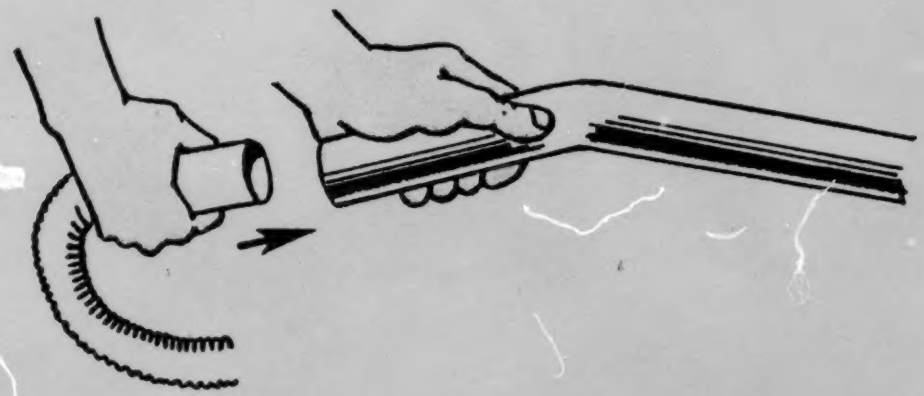
JOB STEPS

1. MOVE ALL THE EQUIPMENT TO THE WORK AREA. USE THE EQUIPMENT CHECKLIST TO BE SURE YOU HAVE EVERYTHING YOU NEED.

2. ATTACH THE VACUUM HOSE TO THE WET VACUUM TANK.

JOB STEPS

3. ATTACH THE OTHER END OF THE HOSE TO THE HANDLE OF THE WAND.

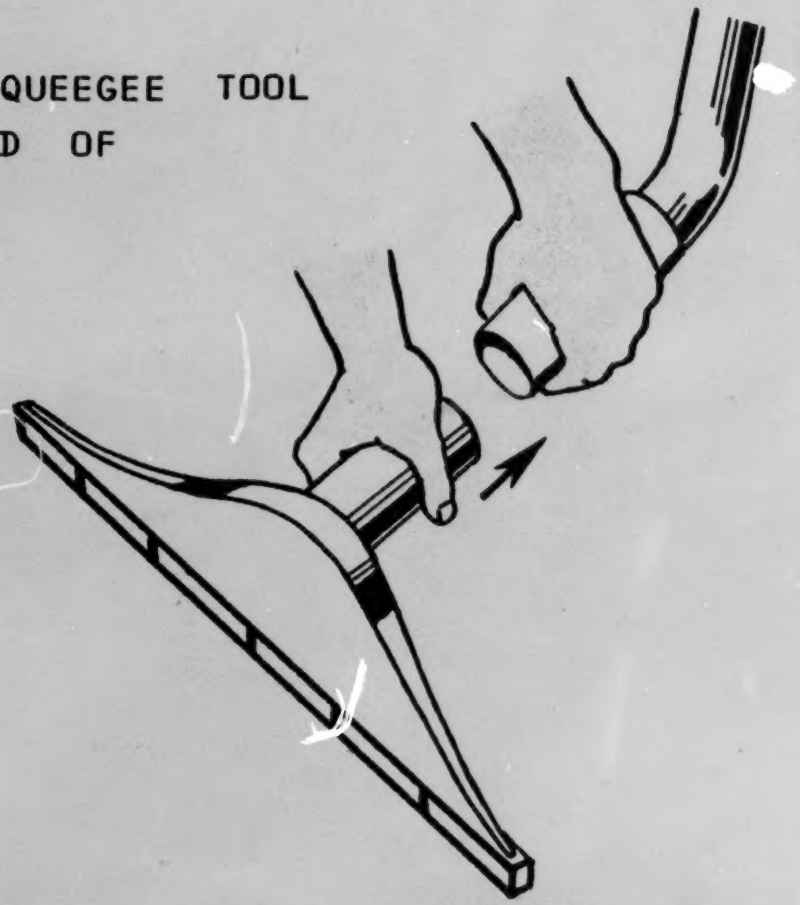


WORD GUIDE

SQUEEGEE - A RUBBER BLADE USED TO PULL WATER ACROSS A FLAT SURFACE.

JOB STEPS

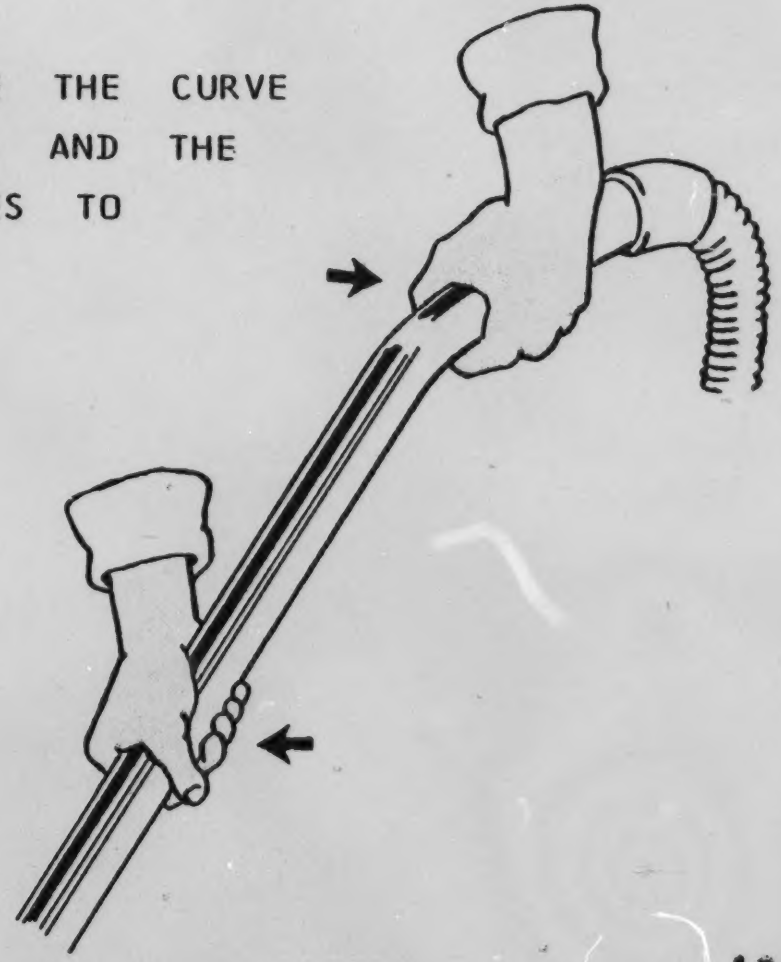
4. ATTACH THE FLOOR SQUEEGEE TOOL TO THE OPPOSITE END OF THE WAND.



JOB STEPS

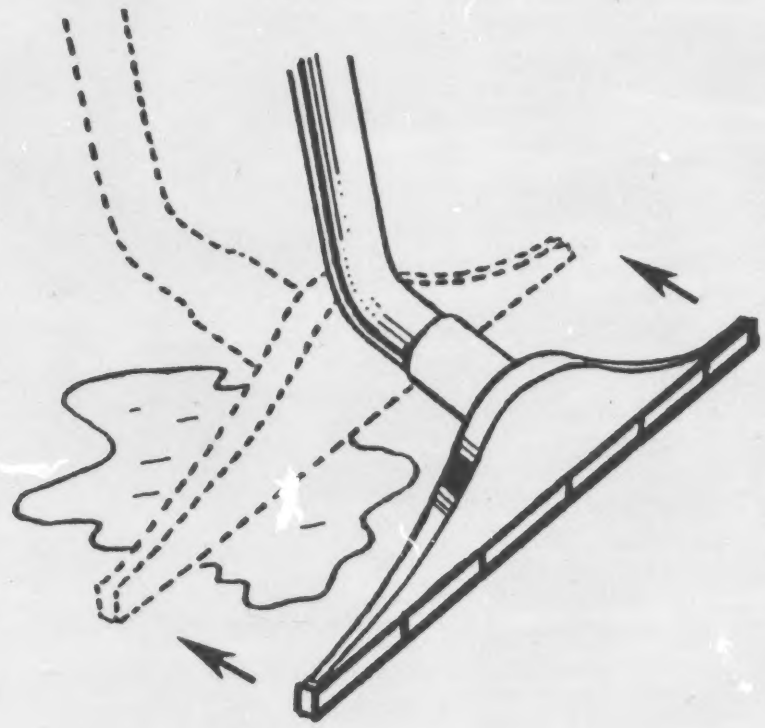
5. BEGIN AT THE FAR END OF THE WORK AREA.

6. PLACE ONE HAND JUST ABOVE THE CURVE AT THE TOP OF THE WAND, AND THE OTHER HAND ABOUT 12 INCHES TO 18 INCHES LOWER.



JOB STEPS

7. PLACE THE FLOOR TOOL SLIGHTLY BEYOND THE SOLUTION ON THE FLOOR AND PULL TOWARDS YOU.



8. SLIGHTLY OVERLAP EACH STROKE.

JOB STEPS

9. WHEN YOU HAVE WET VACUUMED THE ENTIRE AREA, DAMP MOP THE FLOOR TO REMOVE STREAKS. (SEE MODULE ON DAMP MOPPING 2201 01 002 7).

10. RETURN ALL MATERIALS AND TOOLS. BE SURE ALL TOOLS ARE CLEAN.

11. THE SAME PROCEDURES ARE USED ON WET VACUUMING A CARPET.

building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 012 7 date: 12/76 level:

skill title: USE OF AN AUTOMATIC FLOOR MACHINE

developed & written by: LESTER SCHICK

visuals by: SANDRA STARNAMAN

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO STRIP OR LIGHT SCRUB A FLOOR WITH AN AUTOMATIC FLOOR MACHINE.

AND IN ORDER TO DO THIS YOU WILL NEED:

AUTOMATIC FLOOR MACHINE
2 BUCKETS AND WRINGERS
2 MOPS
STEEL WOOL KICK PAD
STRIPPING PADS
WAX REMOVER
LIGHT SCRUB SOAP

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE REMOVED ALL OLD WAX AND BLACK MARKS FROM A FLOOR.

A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION	MATERIALS	LOCATION OF MATERIALS
<u>WHY</u> DO YOU USE AN AUTOMATIC FLOOR MACHINE? BECAUSE OLD WAX SLOWLY BECOMES DULL, DIRTY, AND COVERED WITH BLACK MARKS FROM SHOES. DUSTING AND MOPPING WILL NOT CLEAN THIS OLD WAX. A NEW COAT OF WAX WILL JUST MAKE THE FLOOR HARDER TO CLEAN. AN AUTOMATIC FLOOR MACHINE MAKES THE JOB OF REMOVING THE OLD WAX EASIER AND QUICKER THAN USING A FLOOR BUFFER. BY STRIPPING OFF THE OLD WAX, YOU CAN PREPARE A FLOOR FOR A NEW COAT OF WAX.		

INFORMATION	MATERIALS	LOCATION OF MATERIALS
NOW DO: TO LEARN ABOUT FLOOR STRIPPING, WATCH AND LISTEN TO THE SLIDE TAPE FOR MODULE 2201 01 005 7. IN MOD 2201 01 005 7 YOU LEARNED HOW TO USE A FLOOR BUFFER TO STRIP FLOORS. SOMETIMES YOU MIGHT USE AN AUTOMATIC FLOOR MACHINE TO STRIP A FLOOR. BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT. WHEN YOU HAVE FINISHED THE SLIDE TAPE, CONTINUE THE MODULE BY TURNING TO THE NEXT PAGE.	MODULE 2201 01 005 SLIDE TAPE EQUIPMENT CHECKLIST	

WHAT IS AN AUTOMATIC FLOOR MACHINE?

AN AUTOMATIC FLOOR MACHINE IS _____

A. A MACHINE WHICH AUTOMATICALLY BUILDS NEW FLOORS.

B. A MACHINE WHICH SCRUBS DISHES.

C. USED TO STRIP AND CLEAN FLOORS.

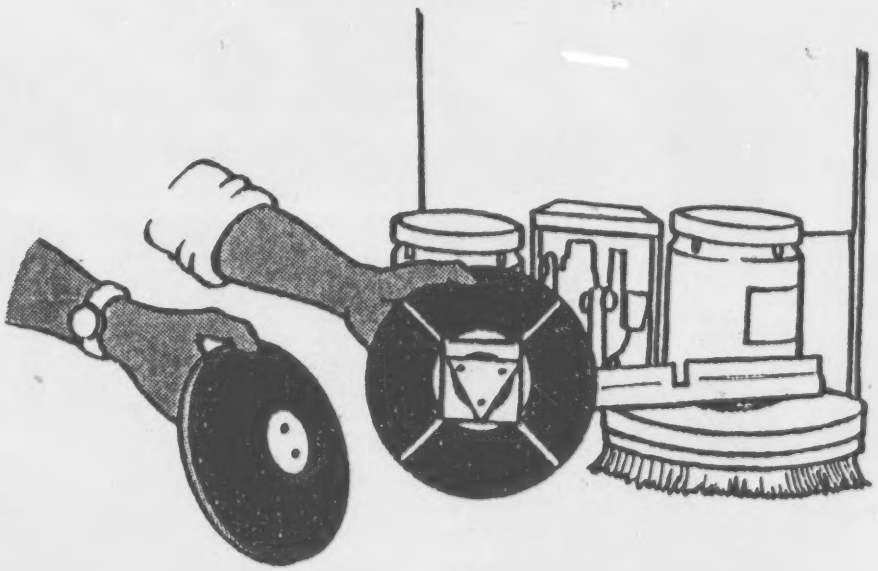
D. USED TO CLEAN BATHTUBS.

HOPE YOU PICKED "C".

JOB STEPS

1. FILL THE SOLUTION TANK 2/3 FULL WITH WARM WATER AND ADD THE CORRECT AMOUNT OF WAX REMOVER ACCORDING TO DIRECTIONS ON THE CONTAINER. YOUR INSTRUCTOR WILL HELP YOU WITH THIS.

2. PLACE THE STRIPPING PADS ON THE BRUSHES AND ATTACH THEM TO THE MACHINE. IF YOU NEED HELP, YOUR INSTRUCTOR CAN SHOW YOU HOW TO DO THIS.



WORD GUIDE

SQUEEGEE - A RUBBER BLADE USED TO PULL WATER ACROSS A FLAT SURFACE.

JOB STEPS

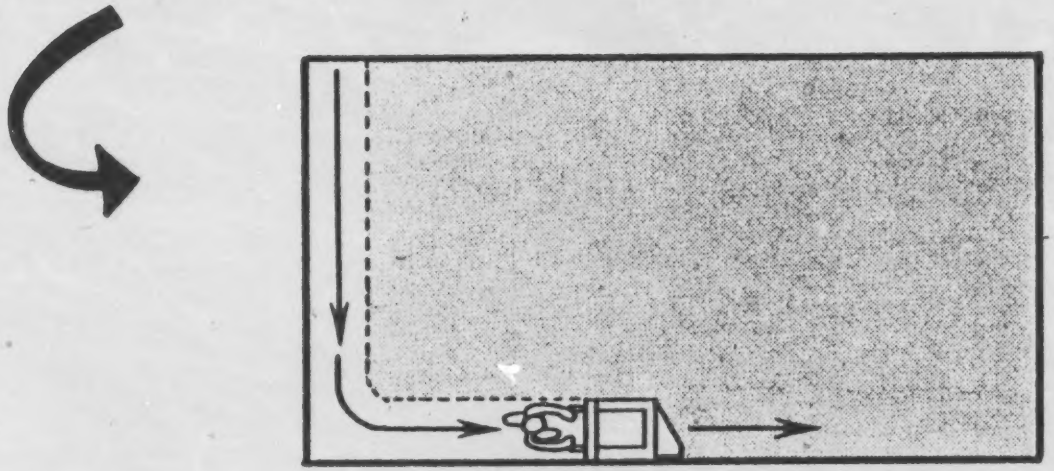
3. MAKE SURE THE PICK-UP TANK IS EMPTY, THE SQUEEGEE BLADE IS CLEAN, AND ALL HOSE CONNECTIONS ARE TIGHT.

JOB STEPS

4. FILL TWO BUCKETS HALF FULL WITH COLD WATER. ADD WRINGERS TO THE BUCKET.

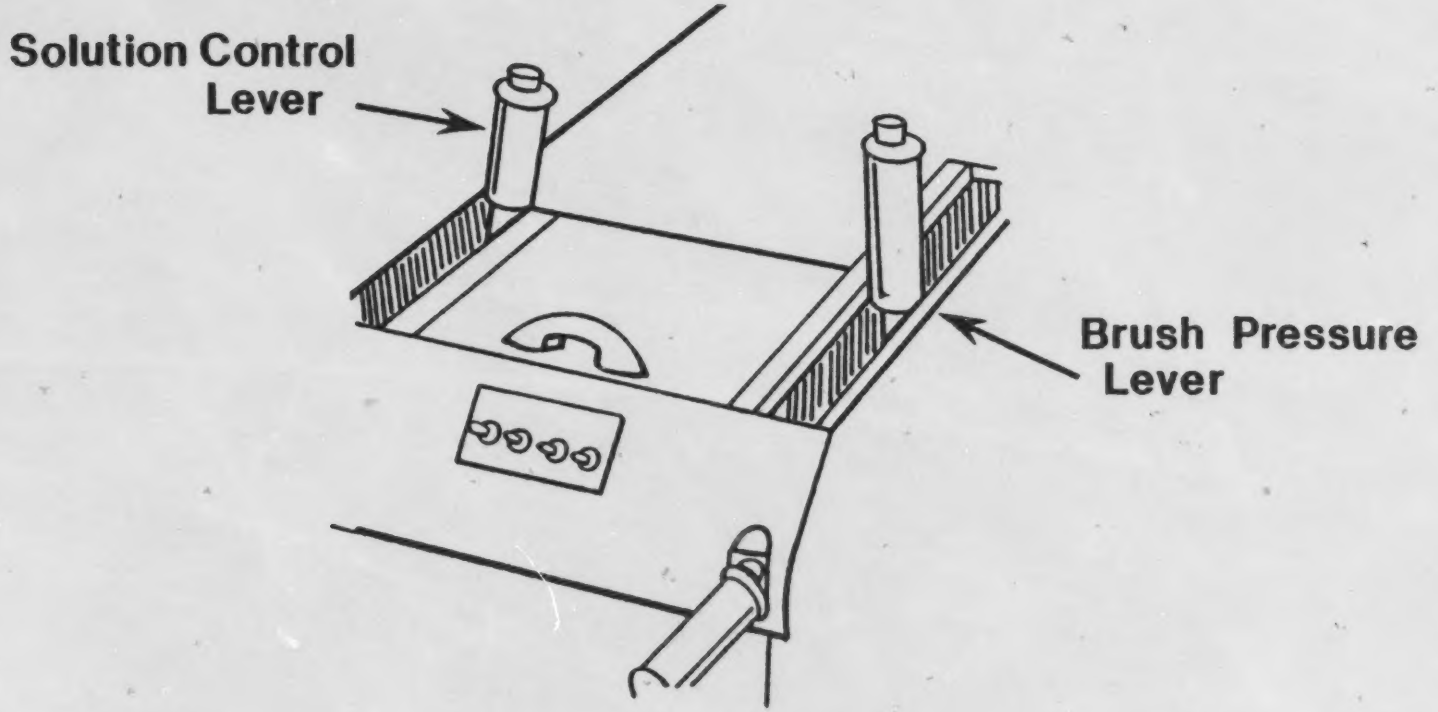
5. MOVE YOUR EQUIPMENT TO THE JOB AREA. USE YOUR CHECKLIST TO BE SURE YOU HAVE ALL THE EQUIPMENT YOU WILL NEED.

6. AN AUTOMATIC FLOOR MACHINE IS USED MOSTLY FOR OPEN AREAS. START AT THE OUTSIDE OF THE AREA TO BE DONE AND WORK AROUND THE AREA TOWARD THE CENTER.



JOB STEPS

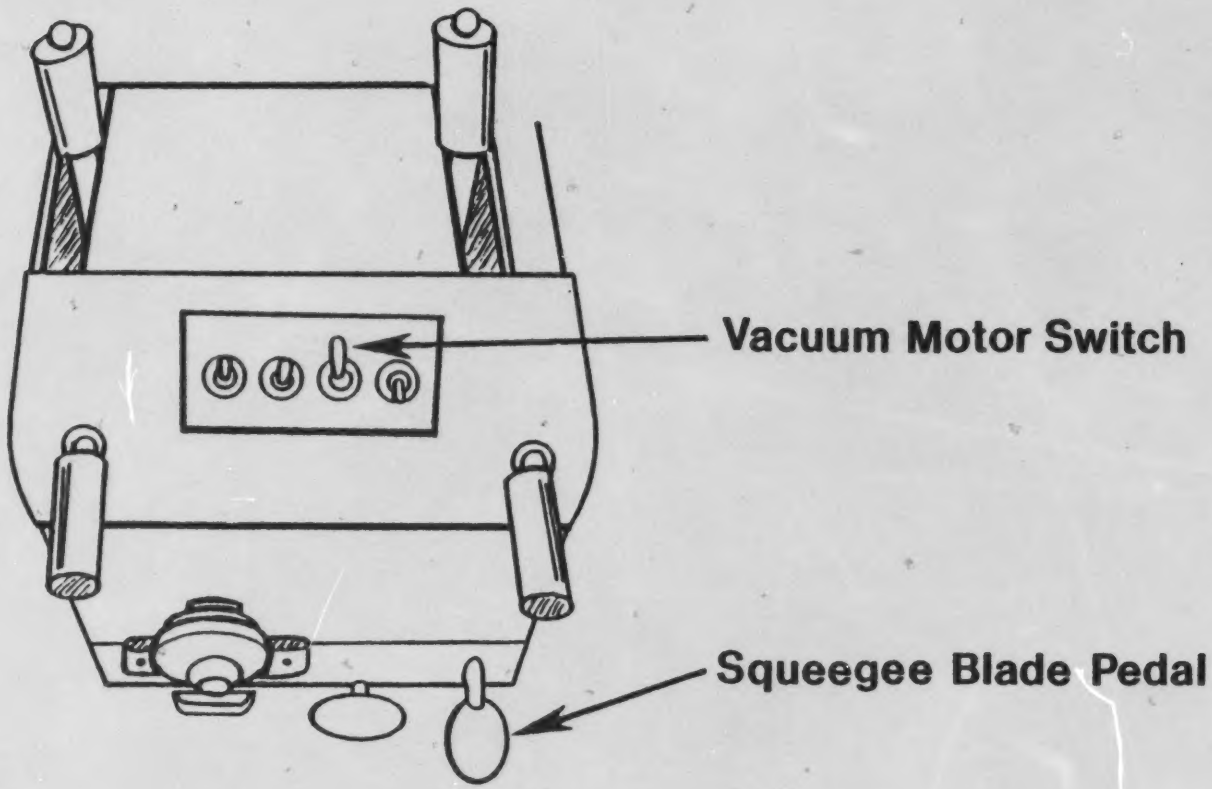
7. SET THE SOLUTION CONTROL LEVER TO THE DESIRED AMOUNT.



8. SET BRUSH PRESSURE TO THE DESIRED AMOUNT. USUALLY ABOUT NORMAL PRESSURE.

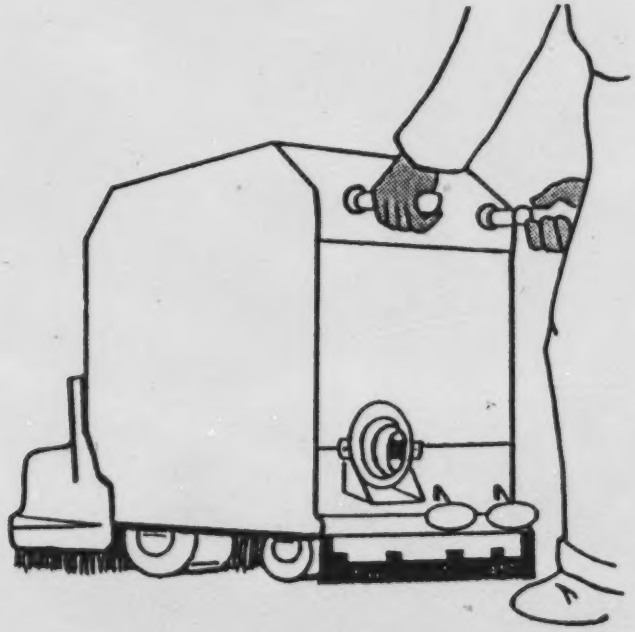
JOB STEPS

9. LOWER THE SQUEEGEE BLADE AND TURN THE VACUUM MOTOR ON. (SEE ILLUSTRATION)



JOB STEPS

10. LOWER THE BRUSH AND TURN ON THE MACHINE. BEGIN MOVING THE MACHINE <u>AT THE SAME TIME</u> AS YOU TURN ON THE MACHINE.

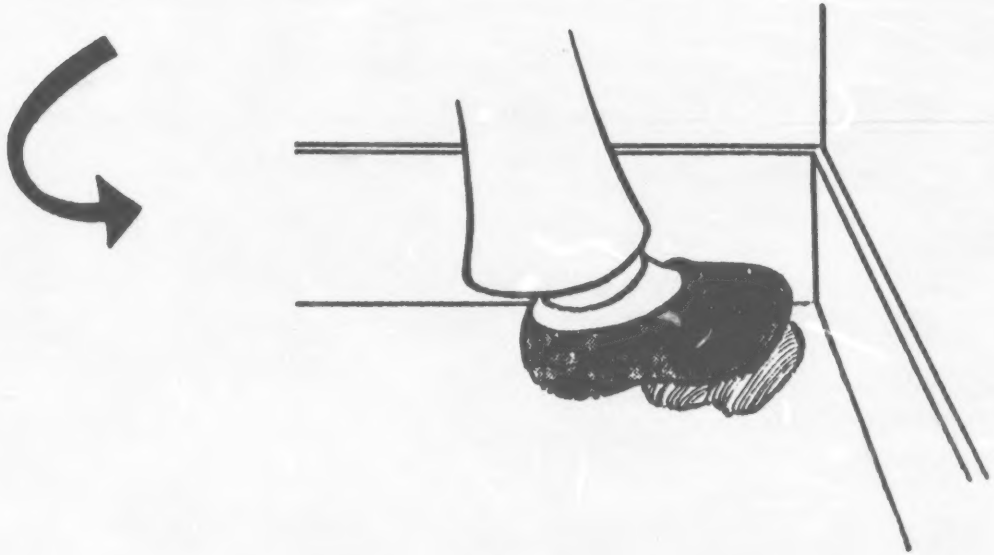


****
* <u>CAUTION</u>: NEVER LEAVE THE MACHINE *
* IN THE SAME PLACE WITH *
* THE BRUSHES RUNNING. *
****

JOB STEPS

11. RUN THE AUTOMATIC FLOOR MACHINE OVER THE ENTIRE AREA TO BE DONE.

12. USE THE STEEL WOOL KICK PAD TO STRIP THE EDGES AND CORNERS.



13. MOP THE ENTIRE AREA TO PICK UP WATER. (SEE MODULE ON DAMP MOPPING A FLOOR 2201 01 002 7).

JOB STEPS

14. IF THE FLOOR IS EXTRA DIRTY, YOU MAY RUN THE AUTOMATIC FLOOR MACHINE WITHOUT THE SQUEEGEE AND VACUUM THE FIRST TIME OVER THE FLOOR.

    THEN GO OVER THE FLOOR A SECOND TIME WITH THE SQUEEGEE AND VACUUM. DO NOT ADD EXTRA WATER TO THE FLOOR.

15. LIGHT SCRUBBING. THE METHODS ARE THE SAME AS IN STRIPPING EXCEPT:

    A. USE A LIGHT SCRUB PAD.
    B. USE COLD WATER WITH A LIGHT SCRUB SOAP.
    C. USE LESS BRUSH PRESSURE.
    D. GO OVER THE FLOOR ONLY ONCE WITH THE AUTOMATIC FLOOR MACHINE.

16. RETURN ALL MATERIALS AND TOOLS. BE SURE ALL THE TOOLS ARE CLEAN.

WORD GUIDE

LUBRICATE - TO ADD OIL OR GREASE

JOB STEPS

17. 17CARE OF AN AUTOMATIC FLOOR MACHINE.

A. EMPTY SOLUTION AND PUCK-UP TANK AND HOSE AFTER EACH USE.

B. FILL THE BATTERIES TO THE PROPER LEVEL. ASK YOUR INSTRUCTOR TO HELP YOU.

C. LUBRICATE WHEN REQUIRED, ACCORDING TO THE MANUFACTURER'S OPERATING MANUAL.

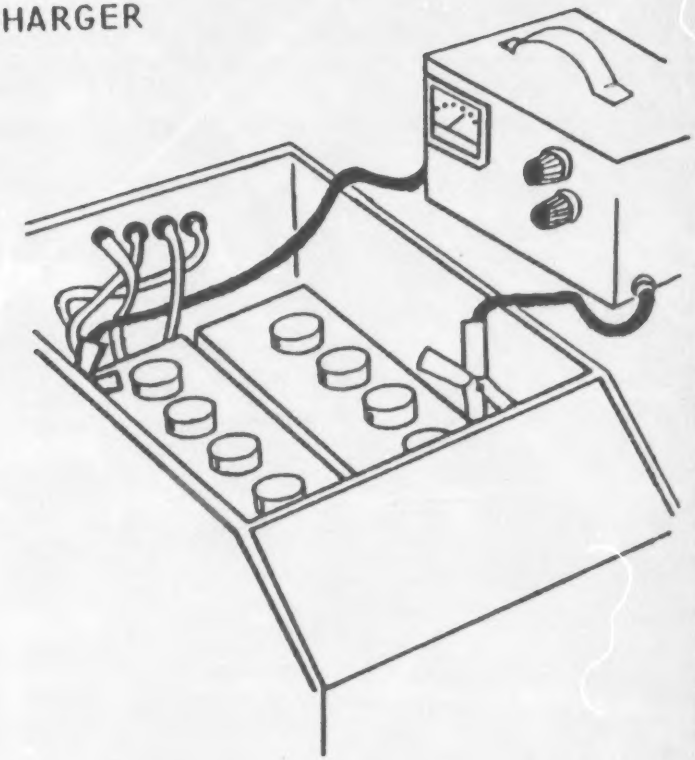
D. DO NOT LEAVE THE SQUEEGEE DOWN WHEN THE AUTOMATIC FLOOR MACHINE IS NOT IN USE.

E. CLEAN THE BATTERY CABLES. SEE INSTRUCTOR.

F. REMOVE AND CLEAN VACUUM MOTOR FILTER.

JOB STEPS

G. PLUG IN THE BATTERY CHARGER AFTER EACH DAYS USE.



building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 013 7 date: 12/76 level:

skill title: FLOOR MACHINE (BUFF FLOOR)

developed & written by: LESTER SCHICK

visuals by: STARNAMAN

WORD GUIDE

BUFF - TO POLISH OR SHINE.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

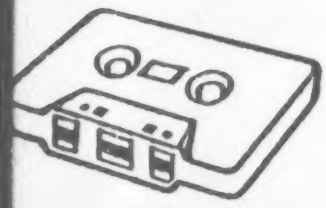
HOW TO OPERATE A FLOOR MACHINE AND BUFF FLOORS.

IN ORDER TO DO THIS YOU WILL NEED:

FLOOR MACHINE
APPROPRIATE BRUSH AND WHITE BUFFING PAD

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE BUFFED A FLOOR SO THAT IT HAS AN EVEN SHINE.



A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

WHY DO YOU BUFF A FLOOR?

THE WAX SHINE ON A FLOOR WILL SLOWLY BECOME DULL FROM PEOPLE WALKING ACROSS THE FLOOR. THE WAX SHINE CAN BE BROUGHT BACK BY BUFFING. IT IS EASIER TO BUFF A FLOOR THAN IT IS TO STRIP OFF THE OLD WAX AND APPLY NEW WAX.

NOW DO:

YOU WILL BE TOLD HOW TO BUFF A FLOOR.

BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT.

INFORMATION

WHAT IS FLOOR BUFFING?

A PERSON WHO BUFFS A FLOOR_____.

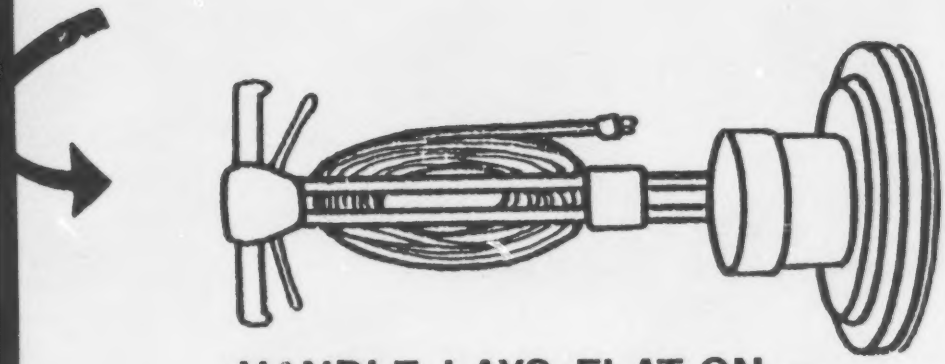
A. STRIPS WAX FROM THE FLOOR.
B. SHINES UP THE DULL WAX ALREADY ON THE FLOOR.
C. TRIES TO HIDE UNDER THE FLOOR.
D. WALKS ACROSS THE FLOOR.

HOPE YOU CHOSE "B".

JOB STEPS

1. TAKE YOUR EQUIPMENT TO THE WORK AREA. USE YOUR CHECKLIST.

2. PLACE BOTH HANDS ON THE HANDLE AND TILT THE MACHINE SO THAT THE HANDLE RESTS ON THE FLOOR.

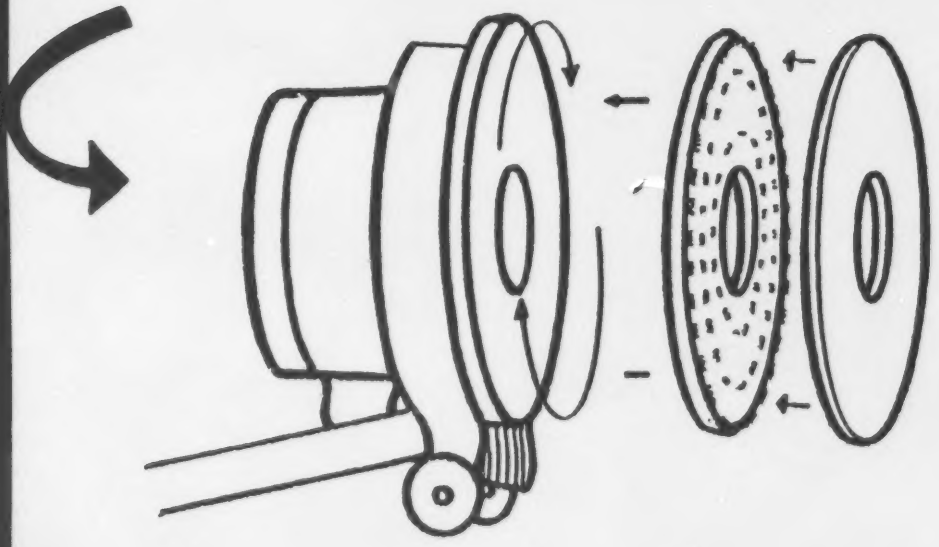


HANDLE LAYS FLAT ON FLOOR

3. ATTACH THE BUFFING PAD TO THE BRUSH.

JOB STEPS

4. ATTACH THE BRUSH TO THE FLOOR MACHINE BY PLACING THE BRUSH PLATE ON THE DRUM. THE SLOTS IN THE BRUSH PLATE WILL MATCH THE SLOTS ON THE DRUM OF THE MACHINE. TURN THE BRUSH UNTIL IT IS TIGHT. YOUR INSTRUCTOR WILL ASSIST YOU ON THIS.



5. PLACE THE MACHINE IN THE UPRIGHT POSITION.

JOB STEPS

6. ADJUST THE HANDLE TO ABOUT WAIST LEVEL AND LOCK THE HANDLE IN PLACE. PLUG THE MACHINE IN.

7. PLACE BOTH HANDS ON THE MACHINE HANDLE AND HOLD IT TIGHTLY.

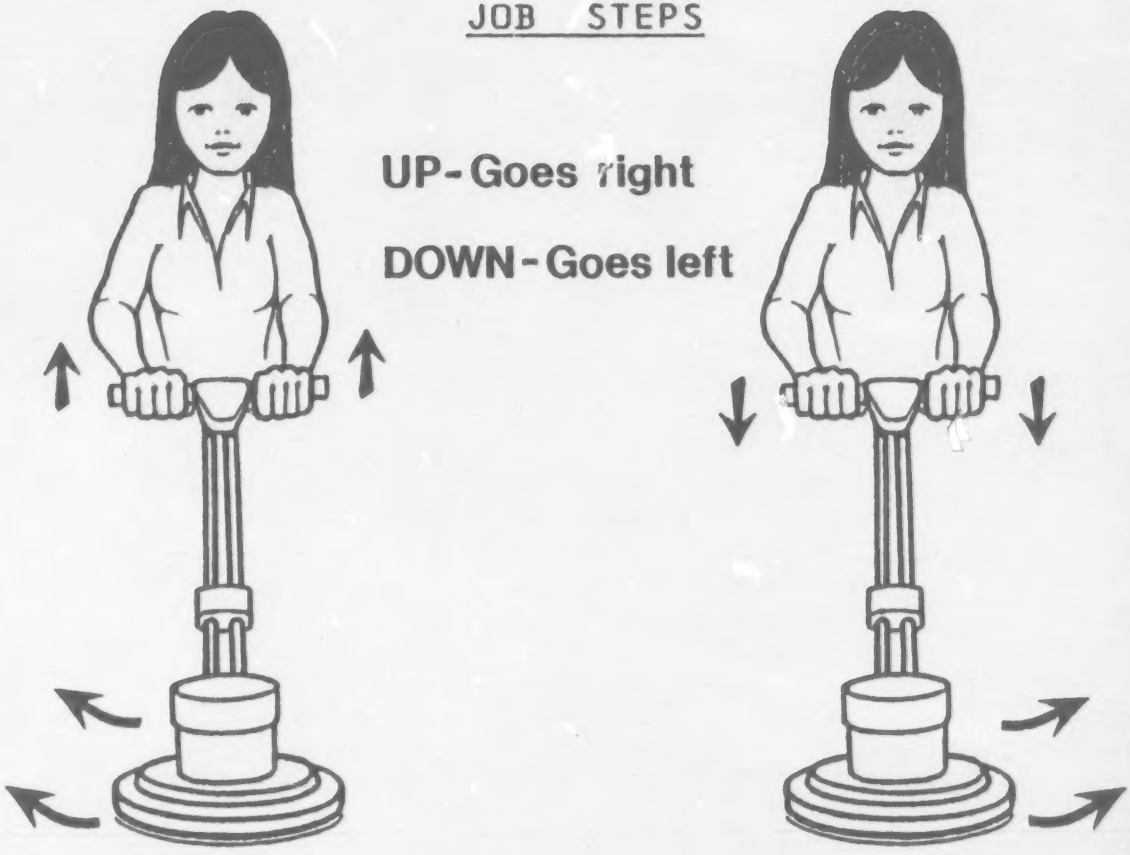
8. BY SLIGHTLY LIFTING ON THE HANDLE, THE MACHINE WILL MOVE TO YOUR RIGHT. SLIGHTLY PUSHING DOWN ON THE HANDLE WILL MOVE THE MACHINE TO THE LEFT.

(SEE ILLUSTRATION ON NEXT PAGE)

9. PRACTICE MOVING THE MACHINE FROM SIDE TO SIDE UNTIL YOU CAN DO IT WITH EASE.

10. CONTINUE THIS UNTIL THE FLOOR HAS BEEN BUFFED. DO NOT MISS ANY PLACES.

JOB STEPS



11. RETURN ALL MATERIALS AND TOOLS. BE SURE ALL TOOLS ARE CLEANED.

building maintenance & engineering

unit: FLOOR CARE

capital area career center

module: 2201 01 015 7 date: 12/76 level: I

skill title: REVIEW AND PRACTICE

developed & written by: LESTER SCHICK

visuals by: SHERRI BAKER

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

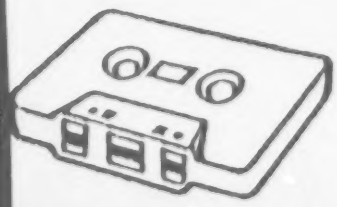
TO CLEAN, SEAL, WAX AND BUFF A RESILIENT FLOOR.

AND IN ORDER TO DO THIS YOU WILL NEED:

3 MOPS
3 PAILS
2 WRINGERS
STRIPPING SOLUTION
SEALER
WAX
WET VACUUM
FLOOR MACHINE
WIRE BRUSH
SCRUBBING PAD
BUFFER PAD

WE WILL KNOW YOU CAN DO IT WHEN:

THE FLOOR IS FREE OF ALL DIRT, AND HAS A HIGH SHINE.



A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

WHAT IS A RESILIENT FLOOR?

A RESILIENT FLOOR IS A FLOOR MADE OF_____.

A. BRICKS
B. OLD WAX, DIRT, AND BLACK MARKS
C. BANANA PEELS
D. "SOFT" TILES, SUCH AS ASPHALT, VINYL, OR VINYL ASBESTOS.

HOPE YOU PICKED "D".

INFORMATION

WHY DO YOU CLEAN, SEAL, WAX AND BUFF A RESILIENT FLOOR?

A TITLE FLOOR BECOMES DIRTY, DULL, AND COVERED WITH BLACK MARKS. IN ORDER TO GET THE FLOOR CLEAN AND PUT A NEW COAT OF WAX DOWN, YOU HAVE TO:

1. STRIP OFF OLD WAX.
2. SEAL THE FLOOR.
3. WAX THE FLOOR.
4. BUFF THE FLOOR.

THESE STEPS RESULT IN A CLEAN, HIGH POLISHED FLOOR.

INFORMATION

TO REFRESH YOUR MEMORY, REFER BACK TO THE FOLLOWING MODULES:

1. 2201 01 5 - STRIPPING A RESILIENT FLOOR
2. 2201 01 8 - SEALING A FLOOR
3. 2201 02 6 - WAXING FLOORS

AFTER YOU HAVE REVIEWED THE MODULES, WATCH THE SLIDE TAPE FOR MODULE 2201 01 5

THEN GET AN EQUIPMENT CHECKLIST FOR THE FLOOR CARE UNIT. STUDY THE JOB STEPS.

INFORMATION

WHAT ARE THE 4 STEPS TO FOLLOW TO PUT A HIGH SHINE ON RESILIENT FLOORS?

THE FOUR STEPS ARE_____.

A. STRIP, SEAL, WAX, AND BUFF
B. STRIP, BUFF, MOP, AND RUN
C. CLEAN, SEAL, WAX, AND STRIP
D. BUFF, RUFF, TUFF, AND SNUFF

HOPE YOU PICKED "A".

JOB STEPS

1. PICK UP THE EQUIPMENT YOU WILL NEED. USE YOUR CHECKLIST TO BE SURE THAT YOU HAVE EVERYTHING YOU WILL NEED.

2. REMOVE ALL FURNITURE AND OBJECTS FROM THE ROOM. IF CARPETS CANNOT BE REMOVED, TURN BACK THE EDGES.

3. DUST MOP THE ENTIRE ROOM UNTIL NO DIRT CAN BE SEEN.

4. PICK UP DIRT WITH A BENCH BRUSH AND DUST PAN. PUT DIRT INTO TRASH CONTAINER.

JOB STEPS

5. ADD STRIPPING SOLUTION TO WARM WATER IN ONE BUCKET. ASK YOUR INSTRUCTOR HOW MUCH TO ADD (USUALLY ONE PART SOLUTION FOR 6 PARTS WATER).

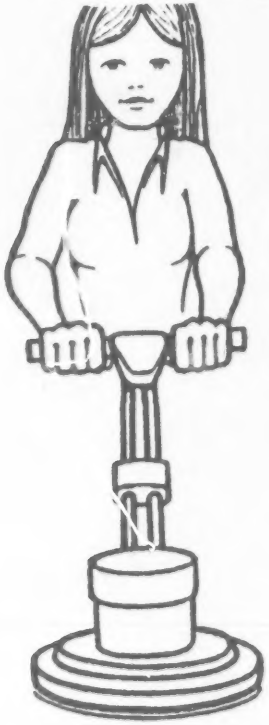
6. APPLY MIXED SOLUTION TO THE FLOOR. BEGIN WITH AN AREA ABOUT 10 FEET BY 10 FEET. USE A VERY WET MOP. BE SURE YOU COVER THE ENTIRE AREA.

7. LET THE SOLUTION STAY ON THE FLOOR FOR 5 MINUTES.

JOB STEPS

8. PUT THE GRAY SCRUB PAD ON THE WIRE BRUSH.

9. PUT THE WIRE BRUSH ON THE FLOOR MACHINE.



10. RUN THE FLOOR MACHINE BACK AND FORTH. OVERLAP EACH STROKE.

JOB STEPS

11. GO OVER THE 10 FOOT BY 10 FOOT AREA WITH THE FLOOR MACHINE.

12. USE THE WET VACUUM TO PICK UP THE SOLUTION FROM THE FLOOR. NEVER LET THE SOLUTION DRY ON THE FLOOR.

13. REPEAT STEPS 6 THROUGH 12 ON ANOTHER 10 FOOT BY 10 FOOT AREA. DO THIS UNTIL THE ENTIRE AREA IS DONE.

14. RINSE THE ENTIRE AREA. USE A MOP AND CLEAN WATER.

15. USE THE WET VACUUM TO PICK UP THE WATER FROM THE FLOOR.

16. DAMP MOP THE ENTIRE AREA. USE A CLEAN MOP AND CLEAN WATER.

17. LET THE FLOOR DRY.

JOB STEPS

18. RUB YOUR FINGERS ACROSS PART OF THE DRY FLOOR. IF THERE IS WHITE DUST ON YOUR FINGERS, DAMP MOP AGAIN WITH CLEAN WATER.

19. LET THE FLOOR DRY COMPLETELY. WHILE THE FLOOR IS DRYING, PUT THE PROPER AMOUNT OF SEALER IN A CLEAN BUCKET. ASK YOUR INSTRUCTOR HOW MUCH SEALER TO ADD. ADD A WRINGER ON THE BUCKET.

20. DIP A CLEAN MOP INTO THE SEALER. SOAK THE MOP. SQUEEZE THE MOP UNTIL IT ONLY DRIPS A LITTLE. DO NOT SQUEEZE THE MOP DRY.

JOB STEPS

21. SWING THE MOP OVER AN 8 FOOT BY 10 FOOT AREA IN A FIGURE 8 MOTION. SOAK THE MOP OFTEN TO BE SURE AN EVEN COAT OF SEALER IS ON THE FLOOR.

building maintenance & engineering

unit: GENERAL MAINTENANCE

capital area career center

module: 220L 02 002 7 date: 12/76 level: I

skill title: FLUORESCENT FIXTURE, SHADE AND TUBE WASHING

developed & written by: BUSTER CRABB

visuals by: SANDRA STARNAMAN

WORD GUIDE

FLUORESCENT - GLOWING LIGHT

FIXTURE - HOLDER OR CONNECTOR.

LOUVERED - METAL OR PLASTIC FINS OR VANES TO COVER LIGHTS OR HEAT OPENINGS. THEY DIRECT LIGHT OR HEAT.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO CLEAN FLUORESCENT TUBES, GLASS OR PLASTIC LIGHTS, LOUVERED TYPE FLUORESCENT SHIELDS, AND FIXTURES.

AND IN ORDER TO DO THIS YOU WILL NEED:

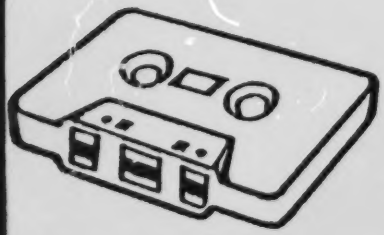
STEP LADDER (SEE PAGE 4, SAFETY / STEPLADDER)
2 PAILS
SPONGE, WIPING CLOTH

. . . YOU WILL NEED:

ALL PURPOSE CLEANER
DROP CLOTH
TABLE OR STAND, WITH CASTORS
SAFETY / CAUTIONS SIGNS (SEE PAGE 3, SAFETY / CAUTION SIGNS)
HELPER (IF POSSIBLE)

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CLEANED A FLUORESCENT TUBE, SHIELD AND FIXTURE.



A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

REASONS FOR HAVING CLEAN FIXTURES AND SHIELDS:

1. INCREASES THE AMOUNT OF USABLE LIGHT.
2. REDUCES ILL HEALTH (EYESTRAIN, HEADACHES, TIREDNESS, ETC.)

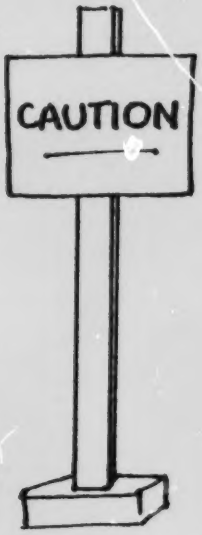
THE SAFETY NEEDS / STEP LADDER:

1. IS YOUR LADDER OF THE PROPER HEIGHT? YOU SHOULD BE ABLE TO REACH THE FIXTURE EASILY.
2. IS THE LADDER STRONG ENOUGH TO HOLD YOUR WEIGHT?
3. IS THE LADDER STURDY AND IN GOOD SHAPE?

INFORMATION

THE SAFETY NEEDS / CAUTION SIGNS:

A. EXAMPLES:



WASHING TANKS AND TABLE. SOME EMPLOYERS USE THIS METHOD FOR CLEANING TUBES AND SHIELDS.

NOTE: TANKS SHOULD BE 6 INCHES TO 12 INCHES LONGER THAN LONGEST SHIELD OR TABLE TO BE WASHED.

INFORMATION

NOW DO:

1. CHECK EQUIPMENT CHECKLIST

2. WHEN YOU KNOW THE INFORMATION ON PAGES 4 AND 5, AND YOUR CHECKLIST IS COMPLETED, CONTINUE TO NEXT PAGE.

JOB STEPS

1. GATHER YOUR EQUIPMENT AND MATERIAL. USE YOUR CHECKLIST TO BE SURE THAT YOU HAVE EVERYTHING YOU NEED.

2. RECHECK SAFETY NEEDS ON PAGE 4.

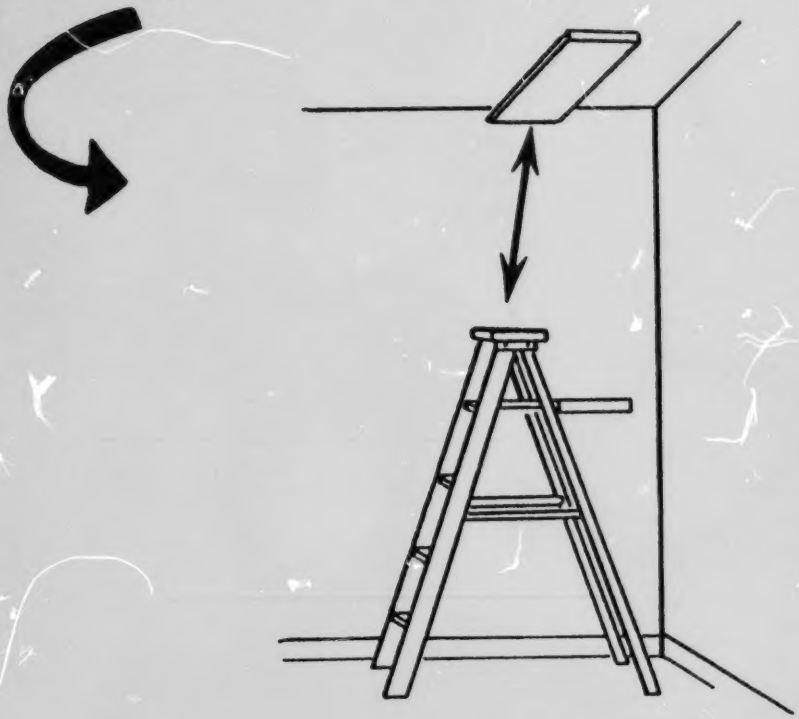
3. FILL BOTH PAILS 1/2 TO 3/4 FULL OF WARM WATER. THEN ACCORDING TO THE DIRECTIONS ON THE ALL PURPOSE CLEANER CONTAINER ADD THE RIGHT AMOUNT TO ONE PAIL. THE OTHER PAIL IS USED FOR RINSE.

4. MOVE EQUIPMENT AND MATERIALS TO THE WORK AREA.

5. PLACE SAFETY / CAUTION SIGNS IN PROPER PLACES.

JOB STEPS

6. PLACE LADDER UNDER FLUORESCENT FIXTURE. BE SURE IT IS SAFE AND SOLID.

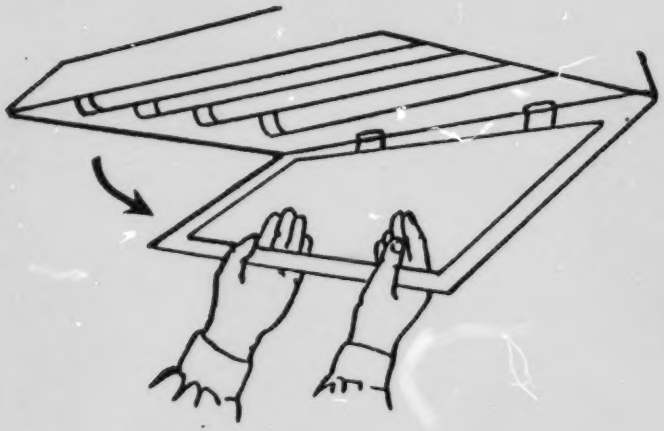


7. IF WASHING TANKS ARE USED, PLACE THEM NEARBY.

8. TURN OFF LIGHTS!

JOB STEPS

9. CLIMB LADDER AND OPEN SHADE.



10. REMOVE FLUORESCENT TUBES AND HAND TO HELPER.

JOB STEPS

11. WASH FIXTURES WITH A DAMP SPONGE AND WIPE DRY WITH A CLEAN CLOTH.

12. THE HELPER SHOULD WASH THE SHADE AND TUBE AND DRY WITH A CLEAN CLOTH.

TURN PAGE →

JOB STEPS

13. RETURN TUBE TO THE LADDER PERSON SO IT CAN BE REPLACED.

14. REPEAT STEPS 9 THROUGH 13 WITH ALL TUBES IN THE FIXTURE.

15. REPLACE THE SHIELD.

16. HAVE HELPER TURN ON ELECTRICAL SWITCH TO CHECK FLUORESCENT LAMP. IF ALL TUBES WORK WELL, GO TO NEXT FIXTURE AND REPEAT STEPS 6 THROUGH 14.

building maintenance & engineering

unit: WALL CARE

capital area career center

module: 2201 02 003 7 date: 12/76 level:

skill title: SPOT CLEAN AND WASH WALLS

developed & written by: BUSTER CRABB

visuals by: SANDRA STARNAMAN

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

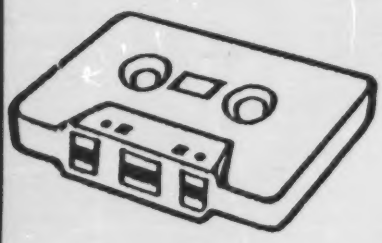
HOW TO SPOT CLEAN AND WASH WALLS.

AND IN ORDER TO DO THIS YOU WILL NEED:

HAND DUSTER
DROP CLOTHS
LADDER OR SCAFFOLD
SAFETY / CAUTION SIGNS
SPRAY BOTTLE
2 SPONGES
ALL PURPOSE CLEANER
2 PAILS
WIPING CLOTHS
RUBBER GLOVES
STEEL WOOL #00

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE COMPLETED ALL THE JOB STEPS BY REMOVING ALL DIRT AND SMUDGES FROM THE WALL.



A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

1. WASH WALLS USING CIRCULAR MOTIONS.

2. DO NOT ALLOW CLEANING SOLUTION TO RUN DOWN INTO A DRY OR UNCLEANED AREA OR AN AREA THAT HAS BEEN CLEANED AND RINSED. THIS CAUSES STREAKING.

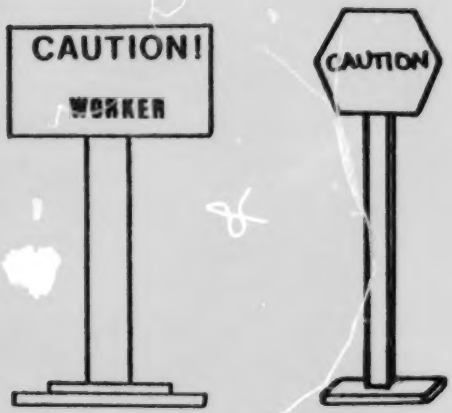
3. WHILE WASHING WALLS, IT IS BEST TO WASH WOOD WORK, MOLDING, DOOR TRIM AND BASEBOARDS TO SAVE TIME AND LABOR.

INFORMATION

4. WALLS CAN BE WASHED BY MACHINE.

5. CARE OF EQUIPMENT AND MATERIALS.

CAUTION SIGNS YOU WILL NEED:



JOB STEPS

PREPARE AREA AND WALLS FOR WASHING.

1. MAKE A DIAGRAM OF ALL FURNITURE, PICTURES, DRAPES OR OTHER FURNISHINGS THAT MAY BE IN YOUR WAY.

2. MOVE FURNITURE ASIDE THAT WILL BE IN YOUR WAY.

3. NOW MOVE ALL EQUIPMENT AND MATERIALS TO AREA FOR CLEANING.

4. SET UP LADDER OR SCAFFOLD AND MAKE SURE IT IS FIRMLY IN PLACE.

5. DUST WALLS LIGHTLY TO REMOVE LOOSE DIRT AND COBWEBS.

6. PUT YOUR SAFETY SIGNS IN PROPER PLACES.

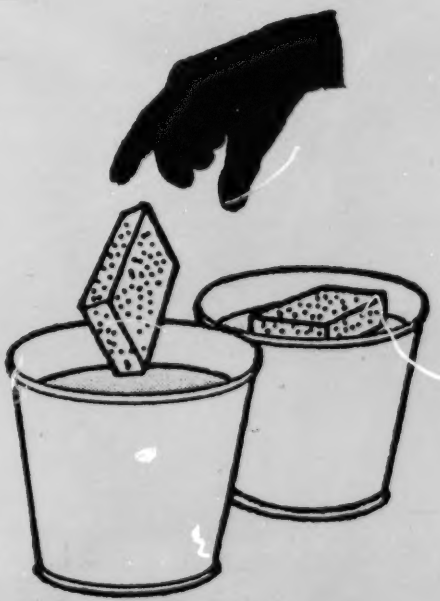
JOB STEPS

WASHING WALLS:

1. TO FIND OUT HOW MUCH CLEANER TO USE, BEGIN WITH 6 OUNCES OF CLEANING SOLUTION TO A 2/3 FULL BUCKET OF WARM WATER. KEEP ADDING 2 OR 3 OUNCES AT A TIME UNTIL THE SOLUTION CLEANS THE WALLS.

2. FILL OTHER BUCKET 2/3 FULL WITH COOL CLEAR WATER.

3. PLACE A CLEAN SPONGE IN EACH BUCKET.

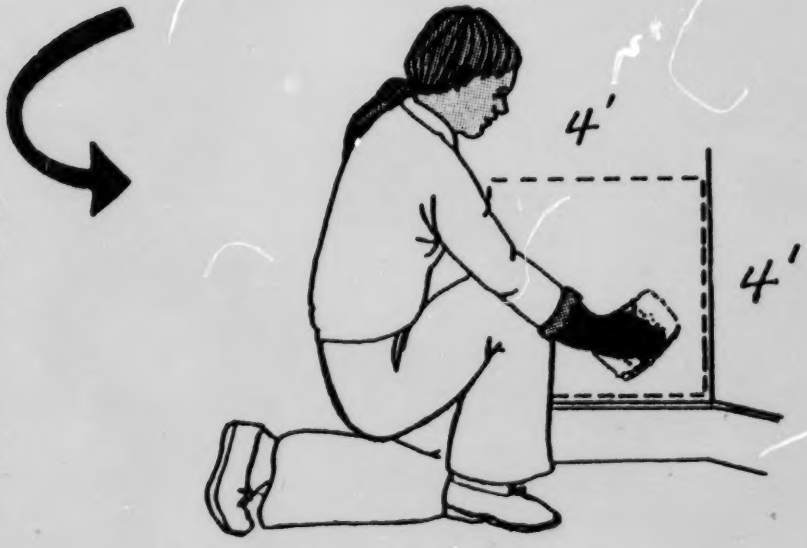


2-3

JOB STEPS

4. SQUEEZE OUT SPONGE FROM SOLUTION BUCKET SO IT WILL NOT DRIP.

5. USING EITHER A CIRCULAR, SIDE TO SIDE, OR UP AND DOWN GO OVER A SMALL AREA, (4 FOOT BY 4 FOOT), UNTIL DIRT IS WASHED OFF.



WORD GUIDE

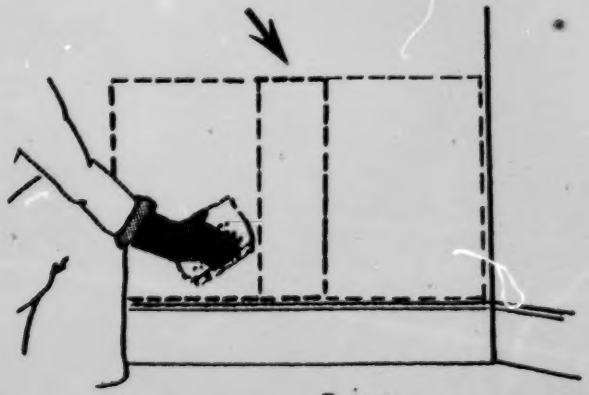
OVERLAP - RE-CLEANING A FEW INCHES INTO EACH CLEANED AREA.

BORDER MARKS - DIRTY MARKS LEFT BETWEEN TO AREAS CLEANED.

JOB STEPS

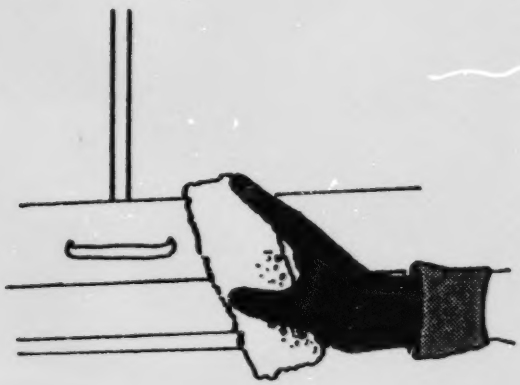
5. USING SPONGE FROM CLEAN WATER BUCKET, SQUEEZE SPONGE AND RINSE THE SECTION WASHED. THEN WIPE DRY.

7. AS YOU MOVE TO THE NEXT AREA TO BE CLEANED, BE SURE YOU OVERLAP INTO CLEANED AREA TO PREVENT BORDER MARKS.



JOB STEPS

8. WASH WOODWORK ON DOORS AND WINDOWS AND ALSO BASEBOARDS WHEN YOU COME TO THEM.



9. IF YOU SPILL OR SPATTER ON THE CLEANED AREA, IMMEDIATELY WIPE OFF WITH A CLEAN DAMP CLOTH.

10. IF RUBBER GLOVES ARE USED, (WITH FULL LENGTH CUFF), FOLD THE CUFFS OVER TOWARD YOUR HAND. AS YOU WASH AREAS ABOVE YOUR HEAD, THE WATER WILL RUN INTO THE CUFF.

building maintenance & engineering

unit: EQUIPMENT CARE

capital area career center

module: 2201 02 005 7 date: 12/76 level:

skill title: CLEANING AND MAINTAINING EQUIPMENT

developed & written by: BUSTER CRABB

visuals by: DAVE WEHRWEIN

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO CLEAN AND MAINTAIN EQUIPMENT.

AND IN ORDER TO DO THIS YOU WILL NEED:

ALL PURPOSE CLEANER
CHROME CLEANER
SPONGES
WIPING CLOTHS
PUTTY KNIFE
STEEL WOOL
SPRAY BOTTLE
METAL CLEANER (STAINLESS STEEL, ALUMINUM, BRASS)
DRYING RACKS
SCRUB BRUSH
SCREWDRIVERS
CRESCENT WRENCH
ELECTRICAL TAPE
HAMMER

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CLEANED AND MAINTAINED ALL EQUIPMENT AND MACHINES USED IN GENERAL MAINTENANCE SO THAT THEY ARE CLEAN AND READY TO USE.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

WHY DO YOU CLEAN AND MAINTAIN EQUIPMENT? HERE ARE A FEW REASONS:

1. CLEAN EQUIPMENT MAKES FOR CLEAN WORK
2. EQUIPMENT OPERATES EASIER
3. EMPLOYERS ARE MORE COMFORTABLE
4. FAILURE OF EQUIPMENT IS LESS LIKELY
5. EQUIPMENT IS SAFER

DON'TS:

1. USE A FLAMMABLE CLEANING CHEMICAL IN CLOSED AREAS
2. USE AMMONIA FOR CLEANING EQUIPMENT IN A SMALL ROOM
3. COIL ELECTRIC CORDS UP TIGHT
4. STORE HOSE WITH KINKS IN IT

DISCUSS THE ABOVE WITH YOUR INSTRUCTOR. TELL YOUR INSTRUCTOR THE "DON'TS" FOR CLEANING AND MAINTAINING EQUIPMENT.

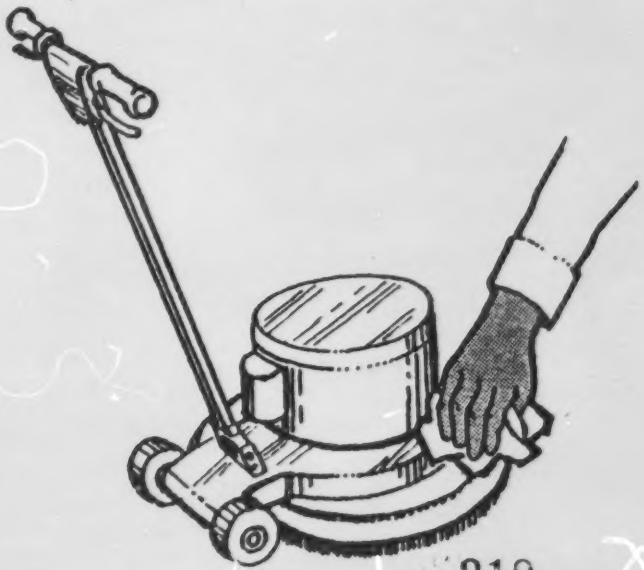
JOB STEPS

1. KNOW WHAT EQUIPMENT YOU USE AND TAKE THE FOLLOWING CARE.

2. FLOOR BUFFING MACHINE, BLOCKS AND PADS:

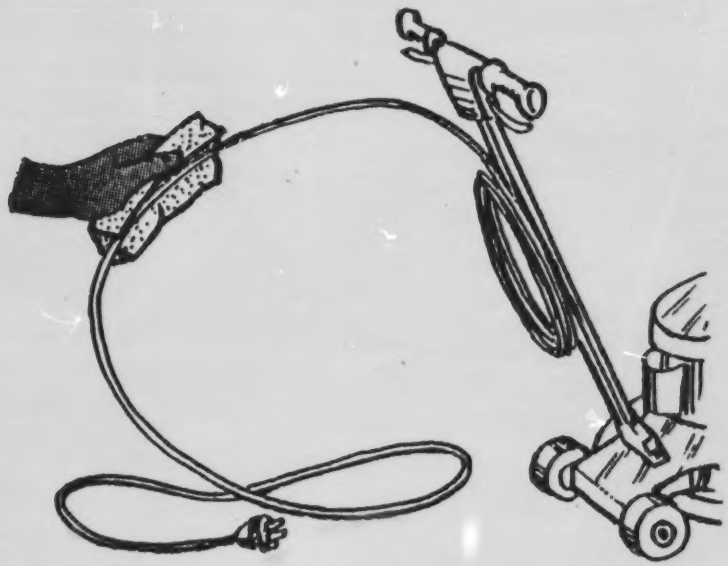
   A. APPLY ALL - PURPOSE CLEANER TO BUFFER AND COMPLETELY SCRUB UNTIL MACHINE IS CLEAN.

   B. WIPE DRY WITH A CLEAN WIPING CLOTH.



JOB STEPS

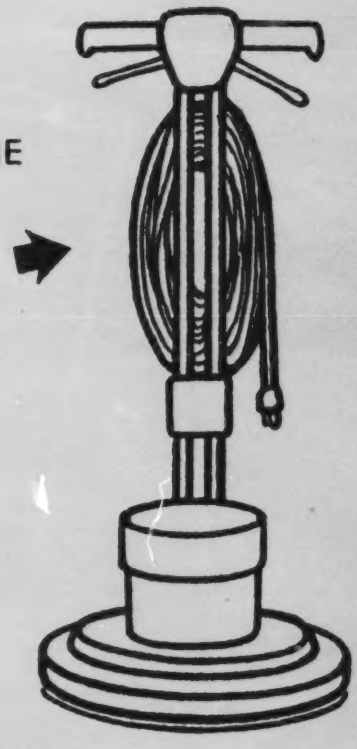
C. CLEAN ELECTRICAL CORD WITH A DAMP SPONGE AND WIPE CLEAN AND DRY WITH WIPING CLOTH.



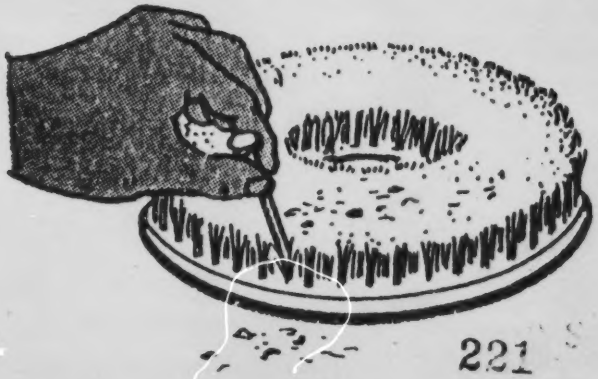
CAUTION: DO NOT PUT CORD PLUG INTO WATER.

JOB STEPS

D. COIL THE CORD LIGHTLY ON THE HANDLE OF THE BUFFER.

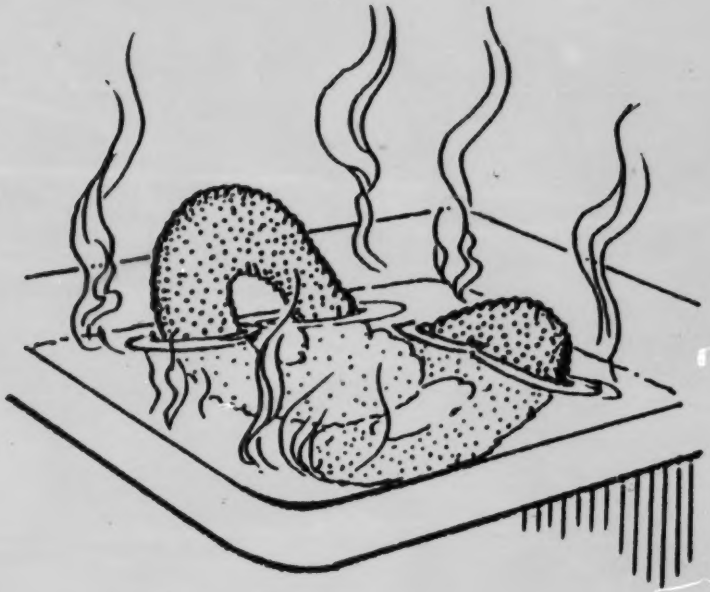


E. CLEAN OUT ANY DIRT WITHIN THE BRISTLES OF THE BUFFER BLOCK.



JOB STEPS

F. WHEN BUFFER PADS ARE DIRTY, SOAK THEM IN HOT WATER WITH A SOLUTION OF ALL - PURPOSE SOAP CLEANER.



G. SCRUB PAD TO GET ALL DIRT AND OLD WAX OUT OF PAD.

H. HANG PAD UP TO DRIP DRY.

I. NEVER LEAVE BUFFER BLOCK OR PAD ON THE FLOOR BUFFER.

JOB STEPS

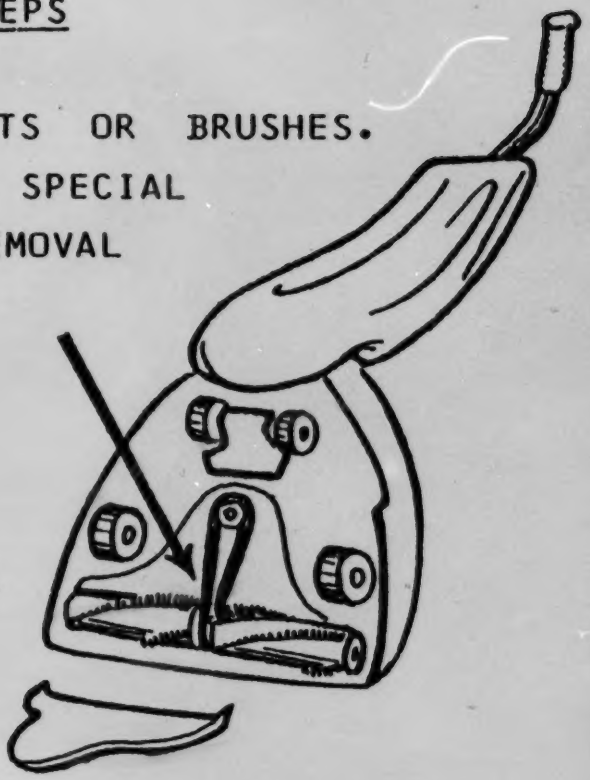
B. VACUUM CLEANER AND BAGS:

A. FOLLOW THE ABOVE JOB STEPS #2A, B, C, D.

E. EMPTY VACUUM BAGS AS NEEDED, SEE INSTRUCTOR FOR SPECIAL INSTURCTIONS FOR REMOVAL AND REPLACEMENT OF CLEAN PAPER INSERTS.

JOB STEPS

F. CHECK FOR WORN BELTS OR BRUSHES. SEE INSTRUCTOR FOR SPECIAL INSTRUCTIONS FOR REMOVAL OR REPLACEMENT.



4. MOP BUCKETS:

A. CLEAN WITH ALL - PURPOSE SOAP CLEANER AND SPONGE.

B. RINSE AND LET DRIP DRY (TURN BUCKET UP - SIDE DOWN).

JOB STEPS

5. MOP HEADS:

A. AFTER EACH USE, RINSE THE MOP WELL.
B. USE MOP WRINGER TO GET ALL THE WATER OUT OF THE MOP.
C. SHAKE MOP TO FLUFF OUT MOP HEAD.
D. HANG MOP HEAD UP TO DRY (HAVE MOP HEAD HANGING DOWNWARD).

6. DUST MOPS:

A. AFTER EACH USE SHAKE MOP TO RELEASE LOOSE DUST AND LINT.

B. DUST MOP HEADS SHOULD BE CHANGED AND LAUNDERED EACH WEEK.

C. SEE MODULE "HOW TO TREAT A DUST MOP" 2201 01 017.

JOB STEPS

7. CORN (HOUSE) BROOM:

   A. PREPARING A NEW BROOM FOR USE:
      1. SOAK THE TIP OF THE NEW BROOM IN CLEAN WATER OVERNIGHT.
      2. HANG UP TO DRIP DRY BEFORE USE, WITH STRAWS DOWNWARD.
   B. WHEN RISING BROOM, TURN BROOM OFTEN SO STRAWS WILL WEAR EVENLY.

8. SPONGES:

   A. WASH WITH ALL - PURPOSE SOAP CLEANER.
   B. RINSE AND WRING OUT TO DRY.

****

CAUTION: USE RUBBER GLOVES WHEN CLEANING A SPONGE THAT WAS USED IN CHEMICALS OR IN REST ROOMS.

****

JOB STEPS

9. OILY RAGS:

   A. DEPOSIT OILY RAGS IN METAL CONTAINER UNTIL WASHED.

   B. WASH IN HOT WATER AND ALL - PURPOSE SOAP CLEANER OR HAVE THEM COMMERCIALLY LAUNDERED.

10. FLAMMABLE LIQUID:

   A. AFTER USE BE SURE LIDS OR SCREW TYPE CAPS ARE TIGHT.

   B. RETURN CONTAINERS TO METAL AND SECURE CABINETS.

****
* CAUTION: NEVER USE ANY FLAMMABLE LIQUIDS UNLESS INSTRUCTOR IS INFORMED OR PRESENT. *
****

JOB STEPS

11. LUBRICATION:

A. FOLLOW INSTRUCTIONS ON THE PARTICULAR EQUIPMENT FOR THE NECESSARY AMOUNT OF OILING OR GREASING.

B. IF IN DOUBT, DISCUSS WITH YOUR INSTRUCTOR.

12. STORE ROOM:

WANTED

JUNKEY MCCLUTTER

THIS SPACE THIEF HAS REPORTEDLY BEEN SEEN IN THIS SCHOOL. HE IS A PROFESSIONAL IN PICKING UP GOODIES FROM DIRECTORS, INSTRUCTORS, COUNSELORS, CUSTODIANS, "THINGS WE COULD USE SOMETIME". HE HAS STOLEN HUNDREDS OF CLOSETS, BOOKSHELVES, CABINET SHELVES, ATTICS, BASEMENTS, BOILER ROOM, CORNERS, ETS. **TURN PAGE →**

WORD GUIDE

ARSON - CAUSING FIRES

JOB STEPS

MR. MCCLUTTER IS WANTED FOR ARSON IN MANY PLACES. IF YOU SEE HIM, DON'T REPORT IT - - BURN HIM.

REWARD - USABLE SPACE SAFE FROM A FIRE HAZARD.

building maintenance & engineering

unit: POLISHING

capital area career center

module: 2201 02 006 7 date: 1/77 level:

skill title: METAL POLISHING

developed & written by: BUSTER CRABB

visuals by: BEVAN SUITS

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO CLEAN AND POLISH METAL SURFACES.

AND IN ORDER TO DO THIS YOU WILL NEED:

WIPING CLOTHS
SPONGES
STEEL WOOL ("OO")
METAL CLEANER AND POLISH
ALL PURPOSE SOAP CLEANER
OIL BASE PASTE WAX
STEP LADDER
PAIL
SPRAY BOTTLE
KEROSENE

WE WILL KNOW YOU CAN DO IT WHEN:

YOU KNOW WHICH CLEANER TO USE ON WHICH METAL; METAL IS FREE OF TARNISH AND STAIN; THERE IS NO TRACE OF CLEANER OR POLISH LEFT ON THE METAL; AND THE METAL IS POLISHED TO A HIGH GLOSS.

A TAPE OF THIS MODULE IS AVAILABLE

WORD GUIDE

GRIT SOAPS - SOAP WITH SAND-LIKE TEXTURE OR GRIT.

GRAIN OF METAL - LINES FOUND ON METAL CAUSED BY MACHINING OF METAL WHEN MADE.

INFORMATION

PRECAUTIONS:

1. GRIT SOAPS SHOULD NEVER BE USED ON CHROME FINISHES.
2. AVOID USING HEAVY SCOURING POWDERS. THEY SCRATCH THE METAL.
3. DETERGENT POWDERS REACT CHEMICALLY WITH CHROME, NICKEL AND ALUMINUM FIXTURES AND TRIM.
4. NEVER APPLY METAL CLEANERS AND POLISHES AGAINST THE GRAIN OF METAL. IF YOU DO, THE METAL WON'T SHINE WELL.

INFORMATION

THINGS TO KNOW AND REMEMBER:

1. METAL POLISH SCRATCHES THE SURFACE OF METAL WITH FINE MARKS, PRODUCING A HIGH LUSTRE (SHINE).

2. CARE MUST BE USED WITH METAL POLISH.
   A. IF SCRATCHES ARE TOO FINE, NO LUSTRE (SHINE) APPEARS.
   B. IF SCRATCHES ARE TOO COARSE, THEN SCRATCHES ARE VISIBLE TO THE EYE AND THE METAL WILL APPEAR DULL.

3. METAL CLEANERS / POLISHES REQUIRE LITTLE RUBBING AND GIVE A BEAUTIFUL FINISH TO COPPER, BRASS, AND CHROME.

WORD GUIDE

PARAFFIN OIL - WAX-LIKE OIL USED TO SEAL OR COAT.

INFORMATION

4. A HOMEMADE METAL POLISH CAN BE MADE BY MIXING PARAFFIN OIL, FINE SCOURING POWDER, AND SOME AMMONIA, AND MIX TO A SMOOTH PASTE, APPLY IT AND LET IT DRY, THEN POLISH.

JOB STEPS

1. OBTAIN EQUIPMENT AND MATERIALS, (ACCORDING TO THE TYPE OF METAL WHICH YOU WANT TO POLISH), AND MOVE TO THE JOB AREA.

ALUMINUM

1. SLIGHTLY OR MODERATELY DIRTY.

   A. APPLY SOAP SOLUTION WITH SPONGE.
   B. RINSE WITH CLEAN WIPING CLOTH.

2. VERY DIRTY.

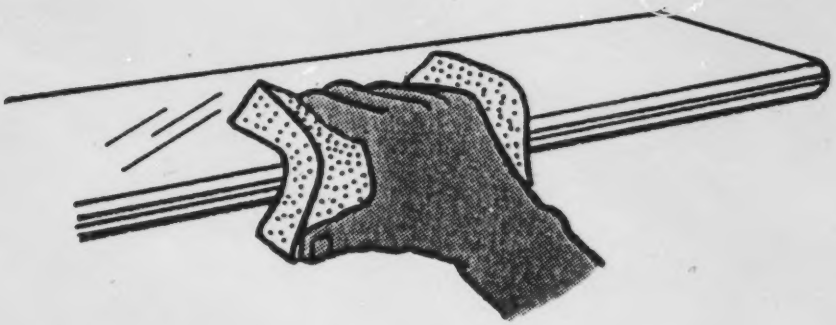
   A. USE FINE "00" STEEL WOOL.
   B. WIPE WITH CLEAN WIPING CLOTH.

JOB STEPS

BRASS, COPPER AND BRONZE

1. APPLY METAL POLISH TO A DAMP SPONGE.

2. APPLY THE POLISH TO THE METAL, RUBBING IN THE SAME DIRECTION AS THE GRAIN OF THE METAL.



3. WHEN A POWDER FILM DEVELOPS, USE A CLEAN WIPING CLOTH AND POLISH THE METAL BY RUBBING IN THE DIRECTION OF THE GRAIN.

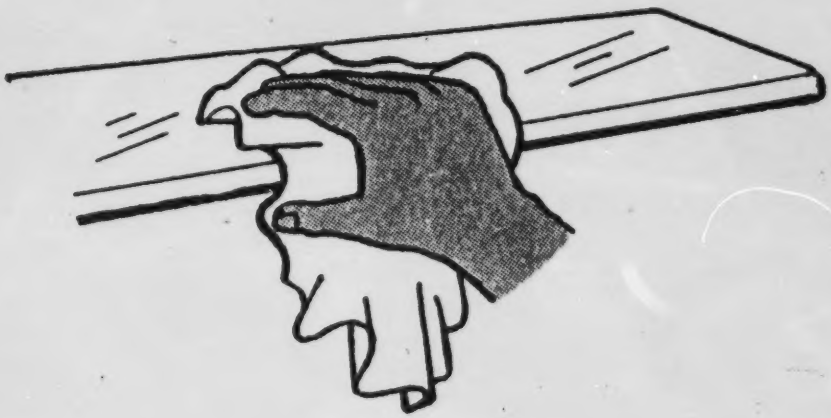
JOB STEPS

CHROME (PLATING)

1. APPLY A SOAP AND WATER SOLUTION, WITH A SPONGE OR SPRAY BOTTLE.

2. WIPE DRY WITH A CLEAN WIPING CLOTH.

3. IF GREASE HAS FORMED ON CHROME, APPLY KEROSENE TO A WIPING CLOTH AND CLEAN.



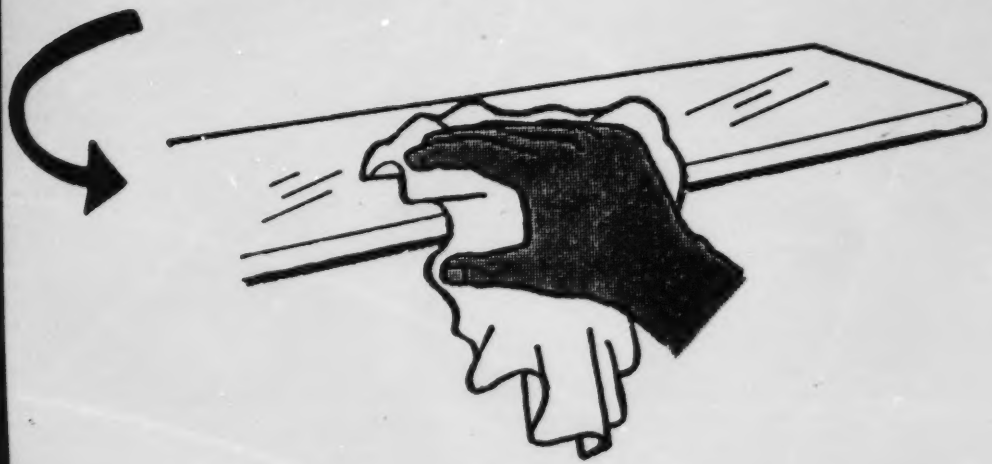
4. WIPE WITH A CLEAN DRY CLOTH.

JOB STEPS

NICKEL (PLATING)

1. APPLY A SOAP AND WATER SOLUTION WITH A SPONGE OR SPRAY BOTTLE.

2. WIPE DRY WITH A CLEAN WIPING CLOTH.



building maintenance & engineering

unit: GLASS CARE

capital area career center

module: 2201 02 008 7 date: 1/77 level:

skill title: THE REMOVING, CUTTING AND REPLACING OF BROKEN GLASS

developed & written by: BUSTER CRABB

visuals by: MARIE GOUGEON

WORD GUIDE

GLAZIER POINTS - USED TO WEDGE GLASS ON WHILE IT'S BEING GLAZED.

SASH - FRAME THAT GLASS IS LAID ONTO.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

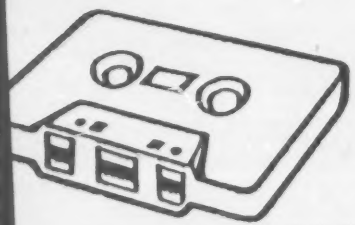
HOW TO REMOVE, CUT, AND REPLACE BROKEN GLASS.

AND IN ORDER TO DO THIS YOU WILL NEED:

- REPLACEMENT GLASS
- GLAZING COMPOUND
- PUTTY KNIFE
- WOOD CHISEL
- PLIERS
- PENCIL
- WIRE CLIPS
- GLOVES (FOR HANDLING BROKEN GLASS)
- CONTAINER FOR BROKEN GLASS
- GLAZIER POINTS
- TAPE MEASURE
- SASH, FRAME OR DOOR
- HAMMER
- SCRATCH PAD
- SAFETY GLASSES

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE INSERTED THE GLAZIER POINTS SO THAT GLASS IS HELD FIRMLY AGAINST SASH, FRAME OR DOOR. GLAZING COMPOUND IS SPREAD SMOOTH, EVEN, AND TIGHT AGAINST THE SASH FRAME. THE GLASS IS CLEAN OF DIRT AND SMUDGES.



A TAPE OF THIS MODULE IS AVAILABLE.

CAUTION: BEFORE YOU USE ANY TOOLS, ESPECIALLY ELECTRIC, BE SURE THAT YOUR INSTRUCTOR OR ANOTHER STUDENT IS THERE TO HELP YOU. WEAR YOUR SAFETY GLASSES.

INFORMATION

WHY DO WE REPLACE BROKEN GLASS?

NOTHING GIVES A BUILDING A MORE RUN DOWN LOOK THAN BROKEN / CRACKED GLASS IN WINDOWS AND DOORS.

ALSO IT COULD BE VERY DANGEROUS. SOMEONE COULD BE CUT.

PUBLIC BUILDING SAFETY CODES USUALLY REQUIRE THE USE OF DOUBLE STRENGTH GLASS OR THE USE OF THERMOPANE (TWO PANES OF GLASS WITH AIR SPACE IN BETWEEN) GLASS.

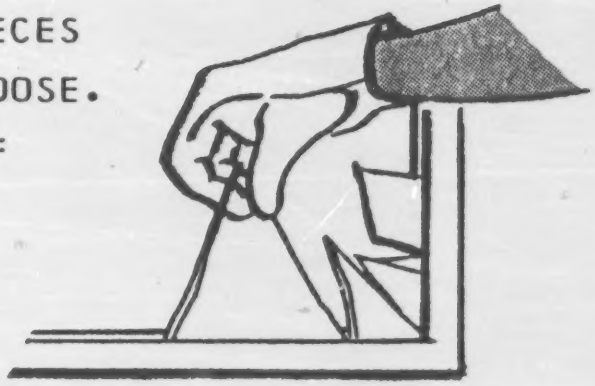
WORD GUIDE

RABBET - EDGE OF SASH FRAME THAT GLASS RESTS ON.

JOB STEPS

A. REMOVAL OF GLASS:

1. REMOVE ALL BROKEN PIECES OF GLASS THAT ARE LOOSE. SAVE LARGER PIECES OF THE OLD GLASS AS IT COULD BE CUT TO FIT SMALLER WINDOWS.

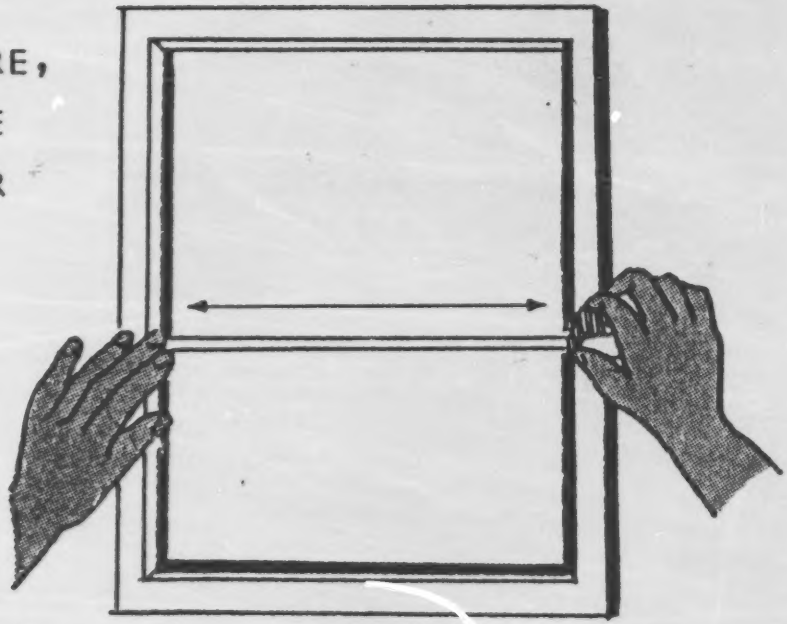


2. WITH THE USE OF A PUTTY KNIFE OR WOOD CHISEL AND HAMMER, REMOVE ALL GLAZING OR PUTTY COMPOUND AND ANY GLAZIER POINTS. BE SURE THE RABBET AREA OF THE SASH IS COMPLETELY CLEAN SO GLASS WILL LIE FLAT.

EXPANSION - WOOD CHANGES SIZE AS TEMPERATURE CHANGES.

JOB STEPS

3. USING YOUR TAPE MEASURE, CHECK THE SIZE OF THE INNER OPENINGS OF YOUR SASH.



4. HAVE GLASS CUT 1/8 INCH SHORTER ON LENGTH AND WIDTH TO ALLOW FOR EXPANSION.

JOB STEPS

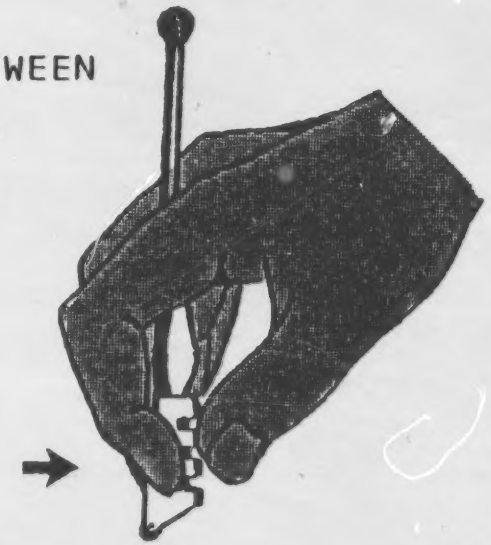
B. CUTTING THE GLASS:

1. MAKE SURE GLASS IS CLEAN.

2. LAY GLASS ON A FLAT SURFACE.

3. DIP CUTTING WHEEL INTO A LIGHT OIL.

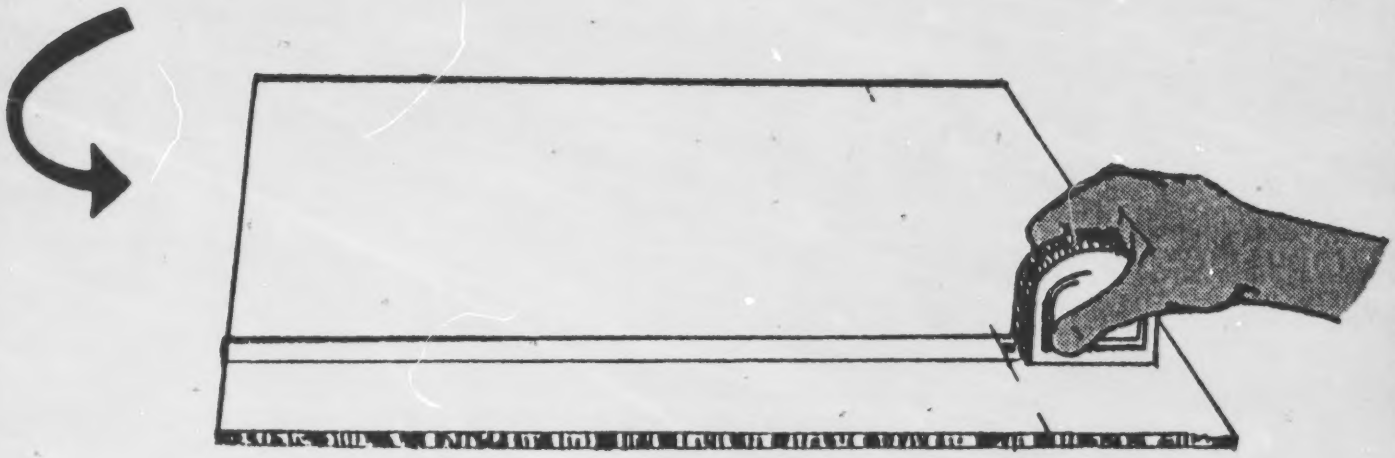
4. FOLD CUTTER UPRIGHT BETWEEN FIRST AND SECOND FINGER WITH THUMB AGAINST NOTCHES.



NOTE: TO GET FEEL OF CUTTER, MAKE A FEW CUTS ON SOME SCRAP PIECES OF GLASS.

JOB STEPS

5. MEASURE SIZE OF GLASS FOR PROPER CUT. MARK IT WITH A SCRATCH FROM CUTTER.

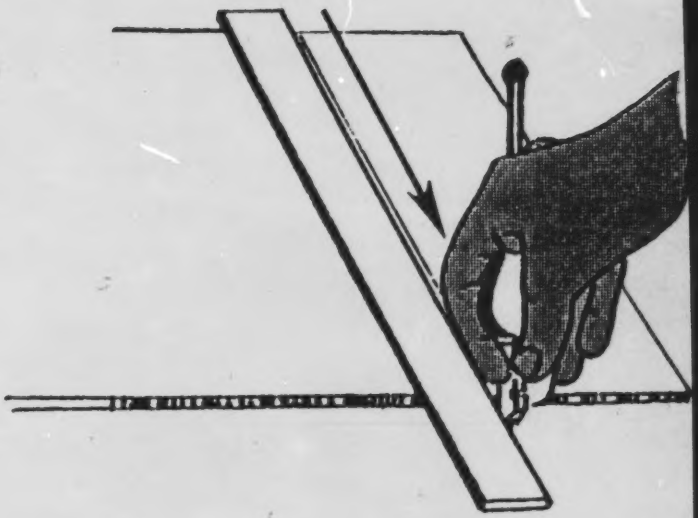


6. ALONG A STRAIGHT EDGE, START CUT 1/16 INCH FROM FARTHEST EDGE OF GLASS.

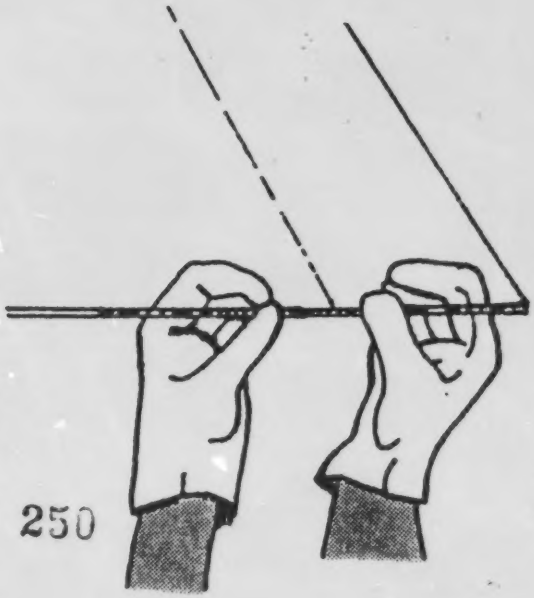
7. DO NOT APPLY HEAVY PRESSURE ON CUTTER WHEEL.

JOB STEPS

8. DRAW CUTTER ACROSS GLASS WITH A FIRM NON - STOP STROKE, ALLOWING WHEEL TO DROP OFF THE EDGE OF THE GLASS.



9. BREAK GLASS BY HOLDING GLASS BETWEEN THE FIRST FINGER AND THUMB OF BOTH HANDS AND GIVING THE GLASS A SLIGHT BEND.

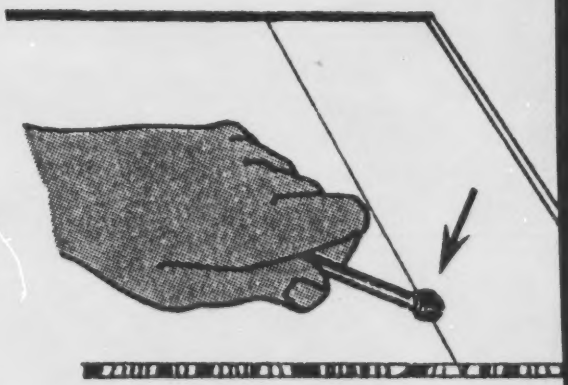


****
* CAUTION: WEAR GLOVES *
****

JOB STEPS

10. USE NOTCHES ON CUTTER TO BREAK OFF SMALL CUTTINGS OR SLIVERS OF GLASS.

11. ANOTHER METHOD OF BREAKING THE CUT IS TO USE THE TOP (THE BALL) OF THE CUTTER TO TAP THE BOTTOM OF THE CUT. THIS WILL FORM A DEEP CRACK UNDER THE CUT. WHEN CRACK EXTENDS THE FULL LENGTH OF CUT, LINE THE

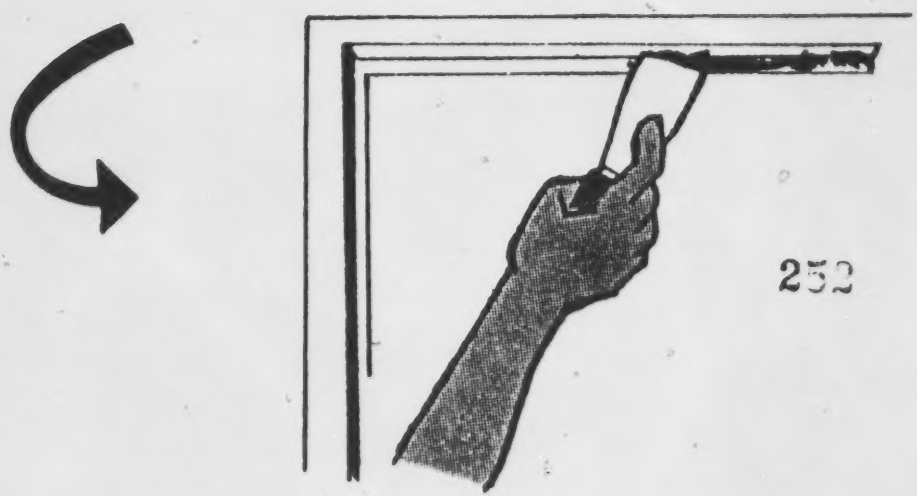


JOB STEPS

11. CUT UP WITH THE EDGE OF THE CUTTING BOARD. SNAP OFF WITH A SHARP DOWNWARD MOVEMENT.

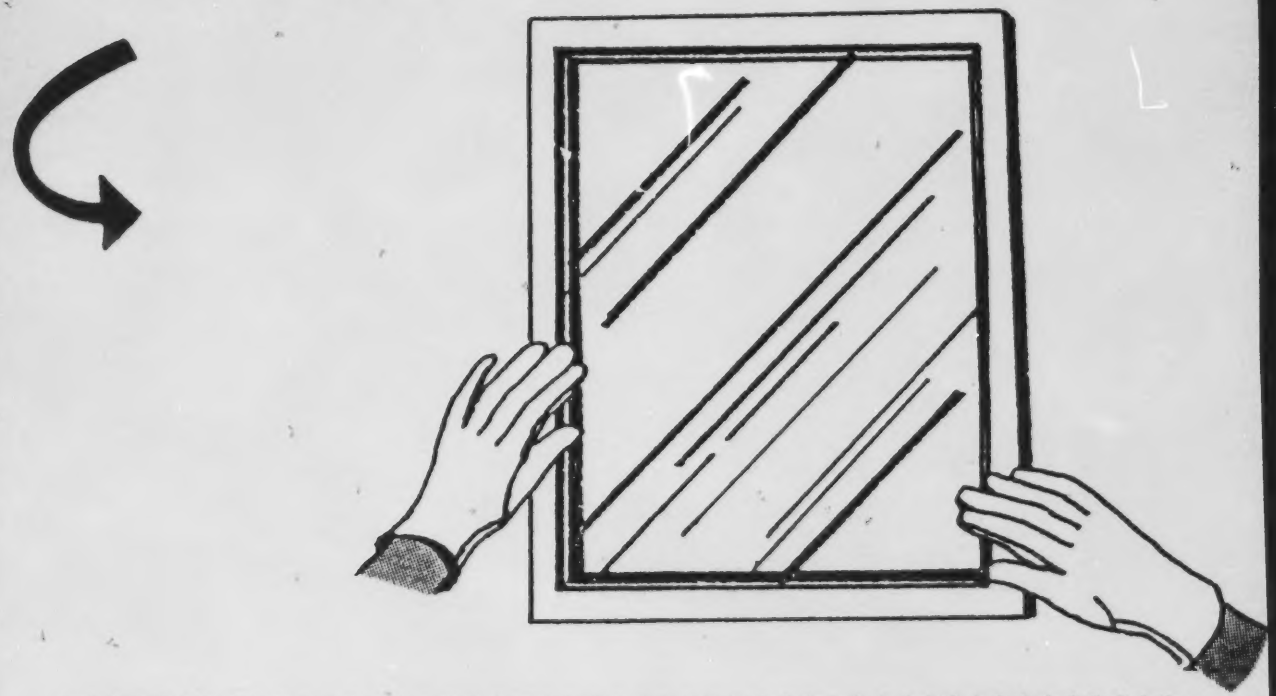
C. REPLACING OF GLASS:

1. USING PUTTY KNIFE SPREAD A THIN LAYER OF GLAZING COMPOUND AROUND COMPLETE EDGE OF RABBET TO FORM A SEAL FOR THE GLASS.



JOB STEPS

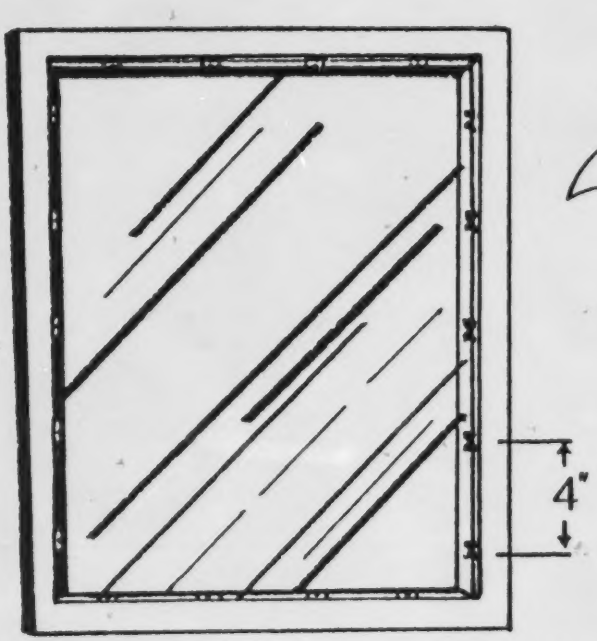
2. PLACE GLASS ON RABBET AND PRESS GENTLY TO SEAL GLASS.

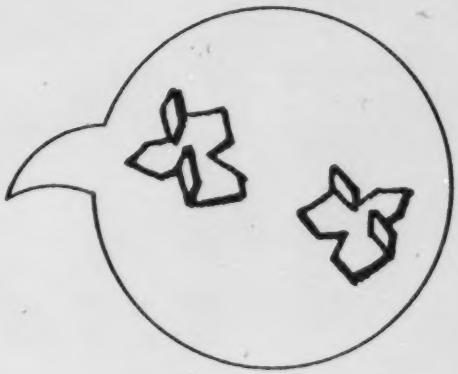


CAUTION: DO NOT RUB ALONG EDGES OF GLASS AS THERE MAY BE ROUGH EDGES THAT COULD CUT YOUR FINGERS.

JOB STEPS

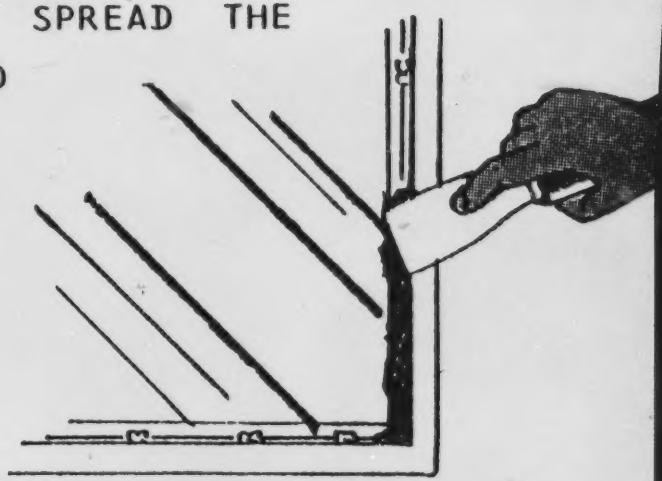
3. ON A WOODEN SASH, USE THE GLAZIER'S POINTS TO HOLD GLASS TO WINDOW SASH OR FRAME. GLAZIER'S POINT'S SHOULD BE PLACED EVERY FOUR (4) INCHES TO HOLD GLASS.





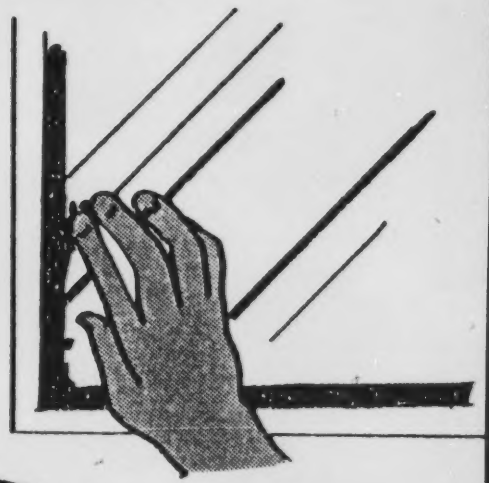
JOB STEPS

4. WITH THE PUTTY KNIFE, SPREAD THE GLAZING COMPOUND AROUND SASH AND SMOOTH OUT FROM THE BOTTOM EDGE OF RABBET TO THE TOP EDGE OF THE RABBET.



5. REMOVE EXCESS GLAZING COMPOUND AND CLEAN GLASS WITH A SOFT CLOTH.

<u>NOTE</u>: BE CAREFUL TO NOT TOUCH THE SMOOTHED OUT COMPOUND AS IT WILL STILL BE SOFT.



TURN PAGE →

JOB STEPS

6. GLAZING COMPOUND WILL NOT HARDEN COMPLETELY, SO BE CAREFUL WHEN REPLACING THE WINDOW SASH INTO THE FRAME.

building maintenance & engineering

unit: MAINTENANCE

capital area career center

module: 2201 02 018 7 date: 1/77 level:

skill title: REPLACE BROKEN FLOOR TILE

developed & written by: DANIEL M. WOODWARD

visuals by: SHERRI BAKER

WORD GUIDE

PROPANE TORCH - SMALL HAND TORCH.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

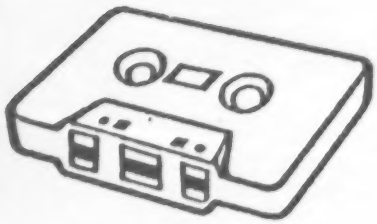
HOW TO REMOVE AND REPLACE A FLOOR TILE.

AND IN ORDER TO DO THIS YOU WILL NEED:

PROPANE TORCH
PUTTY KNIFE
TILE
CEMENT (TILE)
4 - ASBESTOS STRIPS
(4" X 12")
1" PAINT BRUSH
PAPER TOWEL
STRIKER
A HEAVY, OLD BOOK.
PAIL - WATER
SAFETY GLASSES

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE REMOVED THE OLD TILE AND REPLACED IT WITH A NEW TILE SO THAT THE NEW TILE FITS THE FLOOR PATTERN, AND NO TILE CEMENT SHOWS.



A TAPE OF THIS MODULE IS AVAILABLE

INFORMATION

IS IT HARD TO REPLACE BROKEN TILE?

NO - IT IS SIMPLE. THE BIGGEST PROBLEM IS TRYING TO MATCH THE OLD TILE IN SHADE AND COLOR WITH A NEW TILE.

YOU MAY WANT TO LOOK IN SOME STORAGE AREAS IN YOUR BUILDING. MOST BUILDERS ORDER EXTRA TILES AND SELL THEM TO THE OWNERS FOR REPLACEMENT.

WHAT IS THE EASIEST WAY TO REMOVE THE OLD TILE?

IT IS BEST TO USE A PROPANE TORCH. WHEN THE HEAT IS APPLIED, IT MELTS THE TILE CEMENT.

INFORMATION

CAN THE TILE BURN?

YES, YOU MUST KEEP MOVING THE TORCH. DON'T LEAVE IT IN ONE SPOT ON THE TILE.

NOW ANSWER THIS QUESTION:

TO KEEP THE TILE FROM BURNING YOU SHOULD KEEP _____ THE PROPANE TORCH.

A. LIFTING
B. POINTING
C. MOVING
D. SHUTING OFF

HOPE YOU PICKED "C".

WORD GUIDE

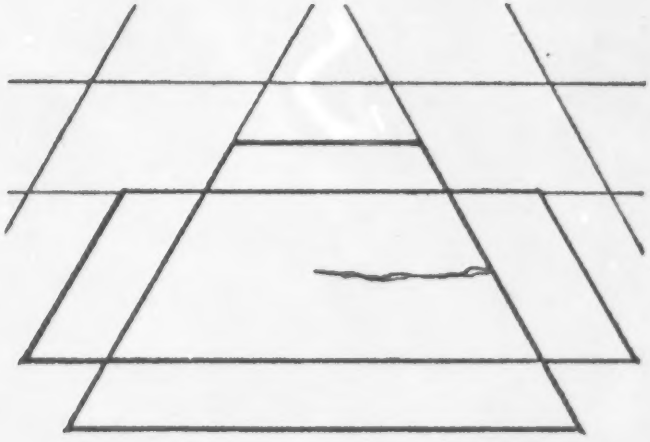
ASBESTOS STRIPS - THIN, FIRE-RESISTENT PAPER

JOB STEPS

1. FILL A PAIL WITH WATER.

2. PUT ASBESTOS STRIPS INTO THE PAIL.
   CAUTION: WEAR YOUR SAFETY GLASSES WHILE DOING THIS MOD.

3. LAY ASBESTOS STRIPS AROUND THE EDGE OF THE TILE TO BE REMOVED.



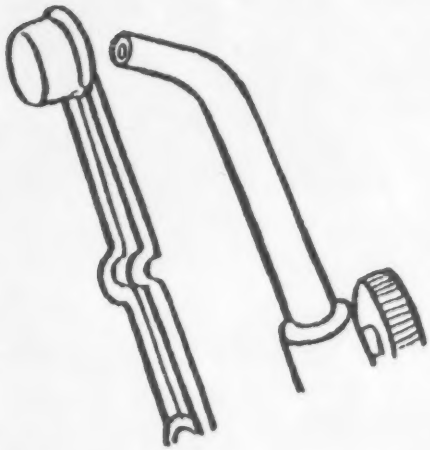
JOB STEPS

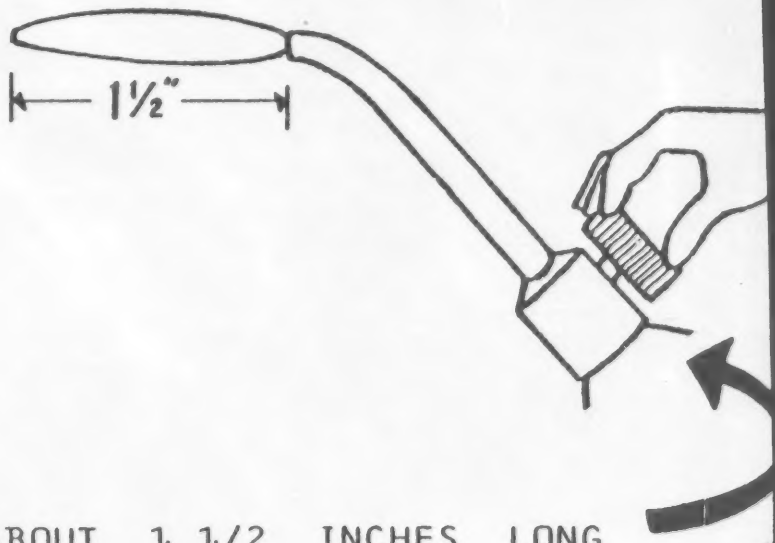
4. OPEN VALVE ON TORCH, AND QUICKLY LIGHT THE TORCH WITH A STRIKER.

****

CAUTION! POINT THE FLAME AWAY FROM YOU.

****

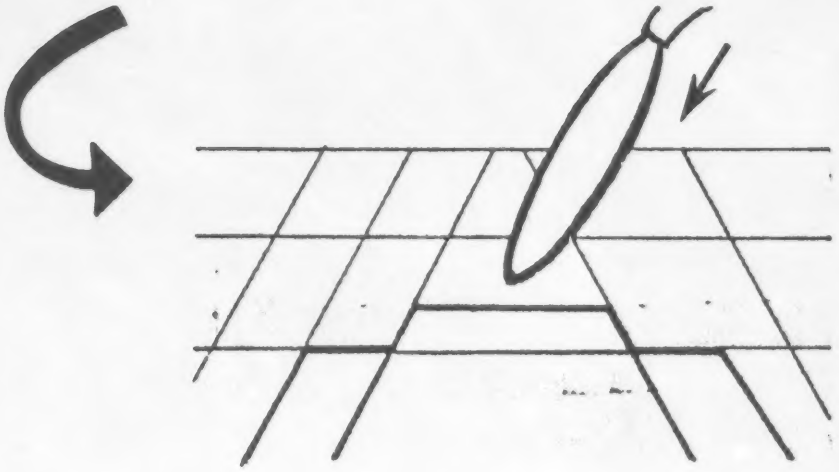




5. MAKE THE FLAME ABOUT 1 1/2 INCHES LONG BY TURNING THE VALVE.

JOB STEPS

6. POINT THE TORCH TO THE CENTER OF THE TILE. DON'T LET THE FLAME TOUCH THE TILE.

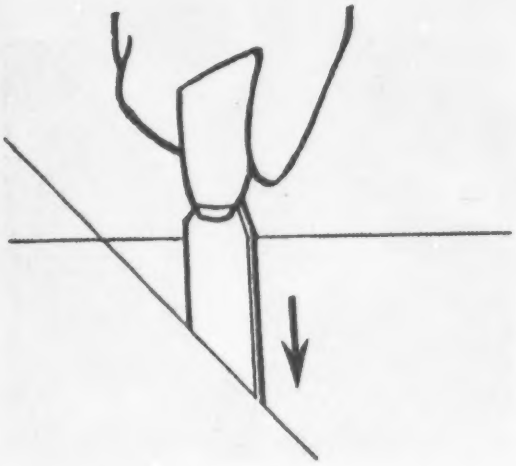


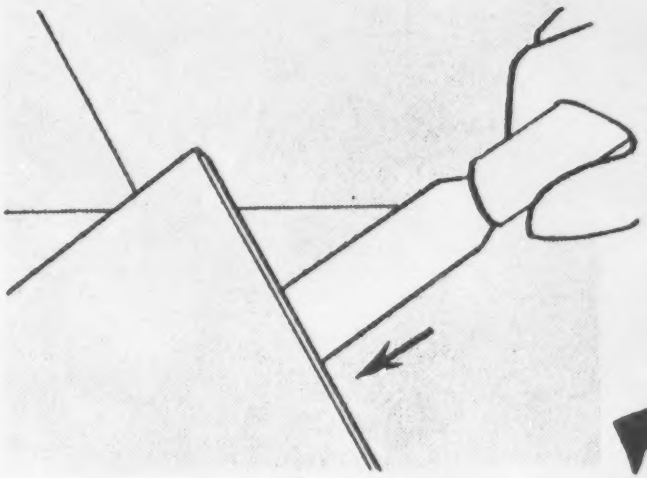
7. MOVE TORCH AROUND THE TILE. START IN CENTER AND WORK TOWARD THE OUTSIDE.

8. KEEP MOVING THE TORCH AROUND AND AROUND FOR 2 MINUTES.

JOB STEPS

9. PUSH THE BLADE OF A PUTTY KNIFE GENTLY INTO THE CRACK AT THE EDGE OF THE TILE.



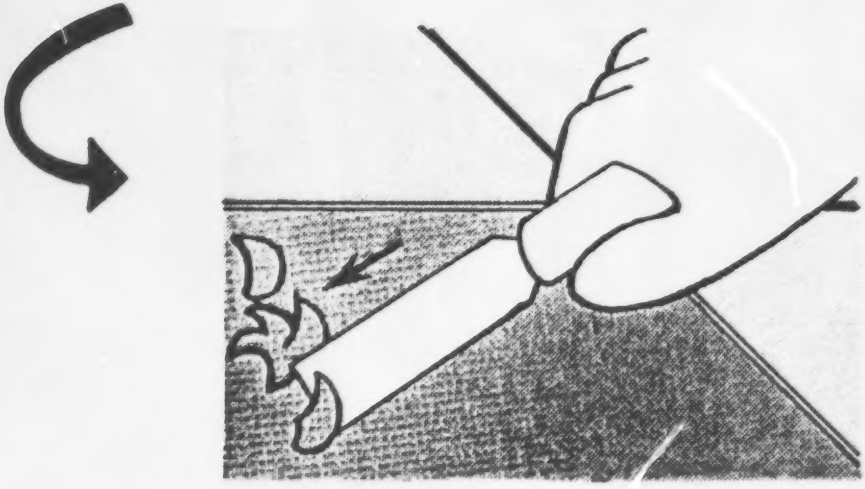


10. SLOWLY LIFT THE TILE UP. IF IT DOESN'T COME UP, DO JOB STEPS 8, 9, AND 10 AGAIN.

11. SHUT TORCH OFF.

JOB STEPS

12. REMOVE THE TILE WITH A PUTTY KNIFE, SCRAPE OFF THE OLD TILE CEMENT.



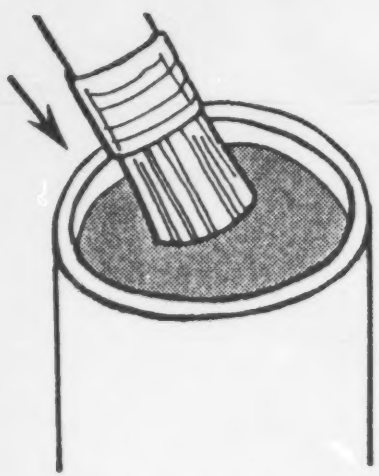
13. CAUTION: DON'T SLIP WHEN PUSHING - THIS WILL CHIP THE OTHER TILES.

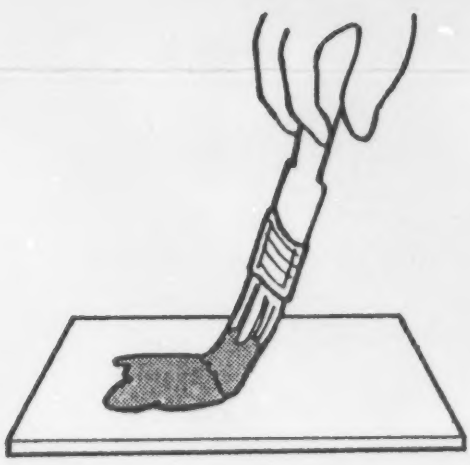
14. CLEAN CORNERS WELL OR THE NEW TILE WILL STICK UP.

JOB STEPS

15. WIPE PUTTY KNIFE OFF.

16. DIP THE BRUSH INTO TILE CEMENT CAN.

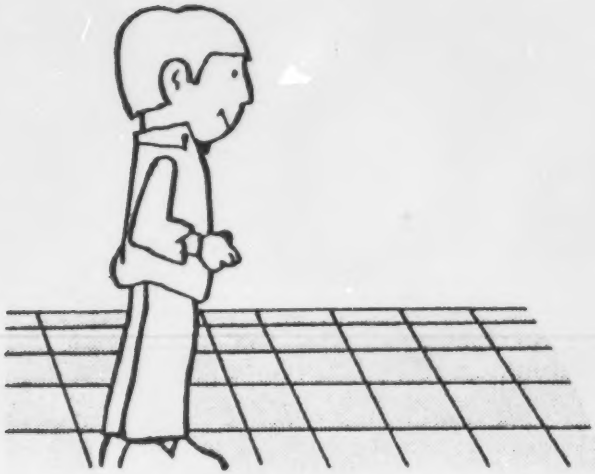


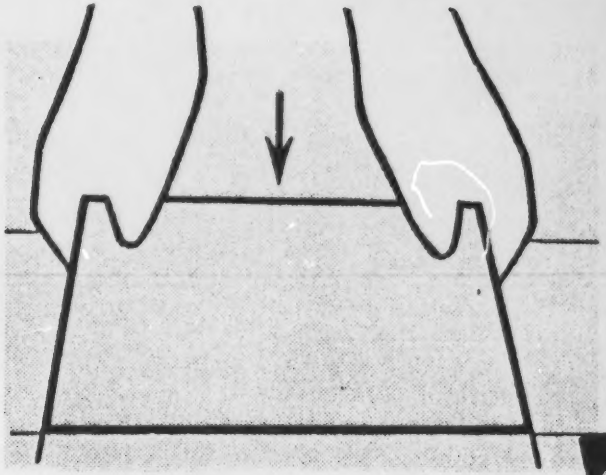


17. BRUSH TILE CEMENT ONTO THE BOTTOM OF THE NEW TILE.

JOB STEPS

18. NOTE PATTERN OF TILE FLOOR.





19. PLACE THE TILE DOWN IN THE CORRECT PATTERN.

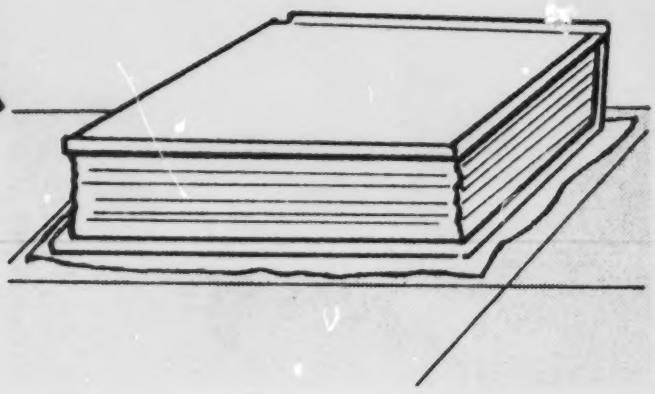
20. WITH THE PUTTY KNIFE AND A RAG, WIPE OFF ANY TILE CEMENT YOU CAN SEE.

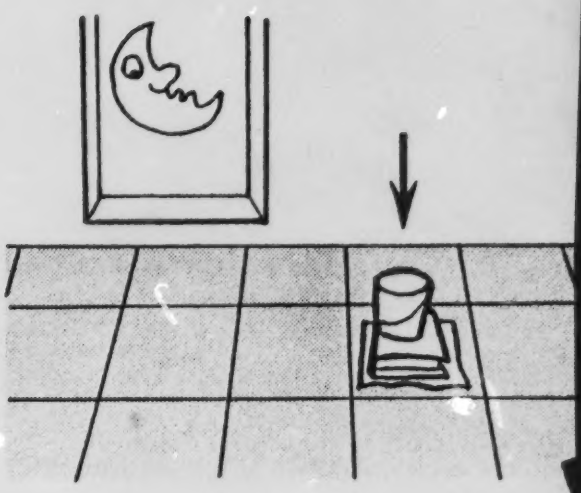
TURN PAGE →

JOB STEPS

21. PLACE A PAPER TOWEL OVER THE TILE.

22. SET A BOOK ON TILE.





23. SET THE PAIL ON THE BOOK AND WAIT 24 HOURS BEFORE REMOVING PAPER TOWEL, BOOK AND PAIL.

24. PUT TOOLS AWAY.

building maintenance & engineering

unit: REST ROOMS

capital area career center

module: 2201 03 001 7 date: 1/77 level:

skill title: FILLING DISPENSERS

developed & written by: A. STEINBERG

visuals by: SHERRI BAKER

WORD GUIDE

DISPENSER - A CONTAINER WHICH HOLDS SUPPLIES LIKE SOAP, TOWELS & CUPS.

SANITARY NAPKIN - AN ABSORBENT PAD SOMETIMES WORN BY WOMEN.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

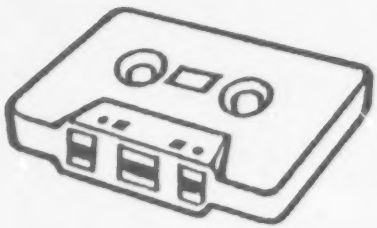
HOW TO CHECK AND SUPPLY ALL REST ROOM DISPENSERS.

AND IN ORDER TO DO THIS YOU WILL NEED:

KEYS TO DISPENSERS
LIQUID, POWDER, AND BAR SOAP
TOILET PAPER ROLLS
HAND TOWELS
SAITARY NAPKINS
PAPER TOILET - SEAT COVERS

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE FILLED ALL REST ROOM DISPENSERS SO THAT THEY ARE FULL FOR THE NEXT DAY.



A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

WHY DO YOU CHECK AND SUPPLY ALL REST ROOM DISPENSERS?

BECAUSE HAND TOWELS, TOILET PAPER ROLLS, SANITARY NAPKINS, PAPER TOILET - SEAT COVERS, AND SOAP ARE QUICKLY USED UP. IF YOU LEAVE THE DISPENSERS EMPTY, NO ONE WILL BE ABLE TO USE THE REST ROOM.

EY CHECKING AND SUPPLYING ALL REST ROOM DISPENSERS, YOU PREPARE THE REST ROOM FOR EVERYBODY'S USE FOR THE NEXT DAY.

BE SURE THAT YOU HAVE AN EQUIPMENT CHECKLIST FOR THE REST ROOMS UNIT.

INFORMATION

WHY DO REST ROOMS HAVE DISPENSERS?

A. TO KEEP REST ROOMS NEAT.

B. TO SAVE TIME.

C. TO KILL MICE

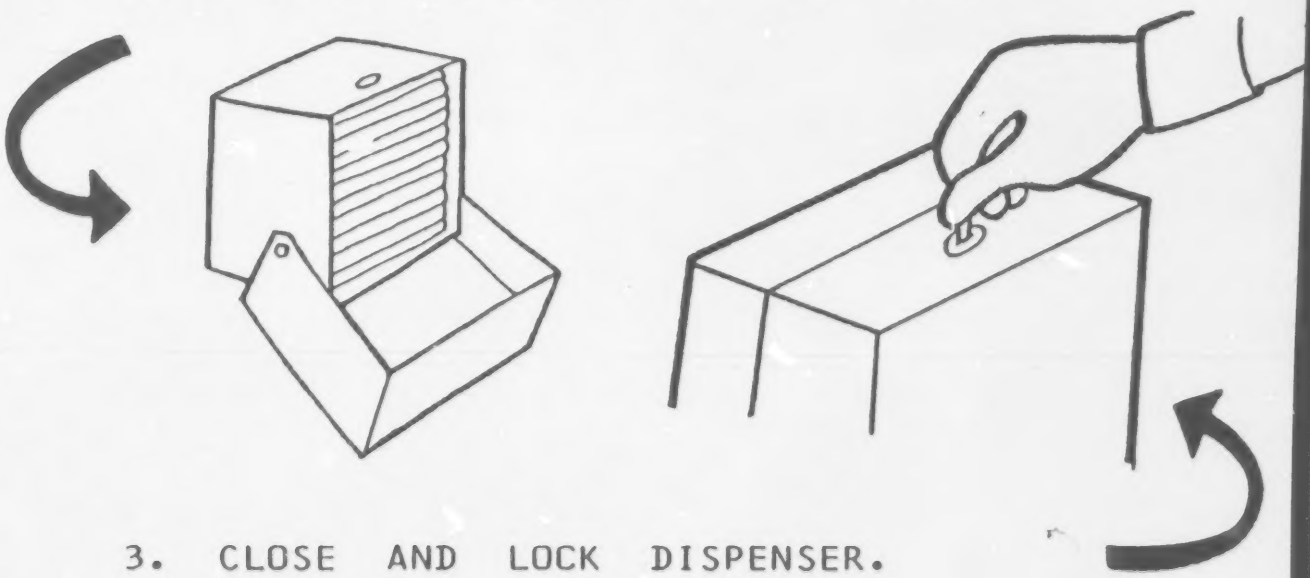
D. TO SERVE EVERYBODY WITH NEEDED BATHROOM SUPPLIES.

DID YOU PICK "D"?

JOB STEPS

1. COLLECT DISPENSER KEYS AND ALL EQUIPMENT AND GO TO YOUR JOB AREA. USE EQUIPMENT CHECKLIST TO BE SURE YOU HAVE EVERYTHING YOU NEED.

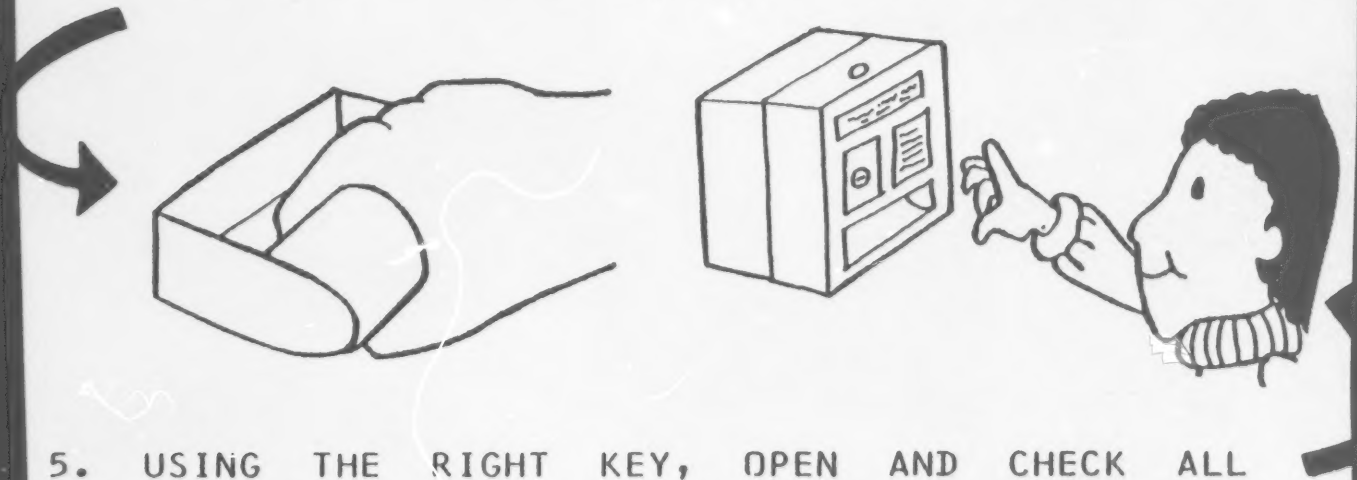
2. USING THE RIGHT KEY, OPEN AND CHECK ALL HAND TOWEL DISPENSERS. READ THE DIRECTIONS ON EACH DISPENSER. FOLLOWING DIRECTIONS, FILL EACH DISPENSER TO THE TOP.



3. CLOSE AND LOCK DISPENSER.

JOB STEPS

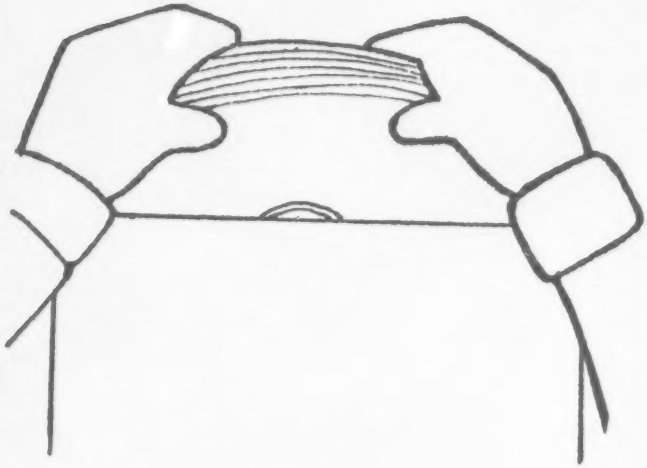
4. USING THE RIGHT KEY, OPEN AND CHECK ALL TOILET PAPER DISPENSERS. IF THERE IS LESS THAN 1/4 OF A ROLL LEFT ON ANY DISPENSER, REPLACE IT WITH A FULL ROLL. SOME DISPENSERS HOLD 2 ROLLS. IN THESE, REPLACE A ROLL ONLY WHEN ONE IS EMPTY. CLOSE AND LOCK DISPENSER.



5. USING THE RIGHT KEY, OPEN AND CHECK ALL SANITARY NAPKIN DISPENSERS. NOTICE THE BRAND OF NAPKINS USED IN EACH. READ DIRECTIONS ON EACH DISPENSER. FOLLOWING DIRECTIONS, FILL EACH DISPENSER WITH THE RIGHT BRAND. CLOSE AND LOCK DISPENSER.

JOB STEPS

6. OPEN AND CHECK ALL PAPER TOILET - SEAT DISPENSERS. READ DIRECTIONS ON EACH DISPENSER. FOLLOWING DIRECTIONS, FILL EACH DISPENSER TO THE TOP. CLOSE THE DISPENSER.

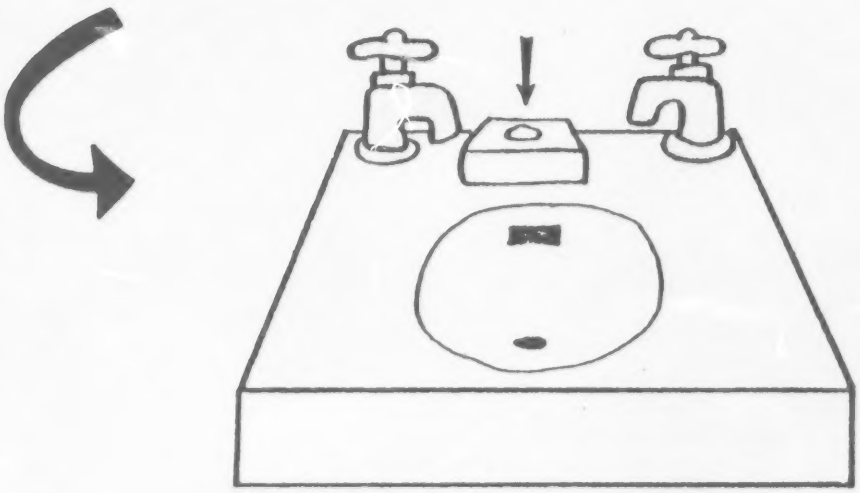


7. OPEN AND CHECK ALL HAND SOAP DISPENSERS. READ DIRECTIONS ON EACH DISPENSERS. FOLLOWING DIRECTIONS, REFILL ALL LIQUID AND POWDER DISPENSERS TO PROPER LEVELS. CLOSE THE DISPENSERS.

TURN PAGE →

JOB STEPS

8. CHECK EACH SINK FOR SOAP BARS. IF THERE IS LESS THAN 1/4 OF A BAR LEFT, REPLACE IT WITH A FULL BAR.



9. RETURN ALL UNUSED EQUIPMENT.

building maintenance & engineering

unit: REST ROOMS

capital area career center

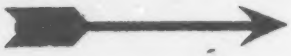
module: 2201 03 002 7 date: 1/77 level:

skill title: SINKS AND MIRRORS

developed & written by: A. STEINBERG

visuals by: SHERRI BAKER

WORD GUIDE



SCOURING POWDER - GRITTY POWDER USED TO CLEAN.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

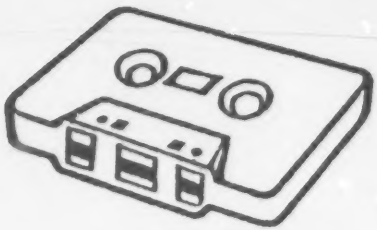
HOW TO CLEAN ALL REST ROOM SINKS AND MIRRORS.

AND IN ORDER TO DO THIS YOU WILL NEED:

SCOURING POWDER
GLASS CLEANER
ALL - PURPOSE CLEANER - DISINFECTANT
SPONGES
WIPING CLOTHS

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CLEANED STAINS, WATERMARKS, AND DIRT FROM REST ROOM SINKS AND MIRRORS.



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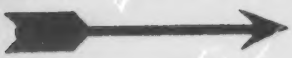


WORD GUIDE

SANITARY - FREE FROM DIRT AND BACTERIA.

INFORMATION

WHY DO YOU CLEAN REST ROOM SINKS AND MIRRORS?

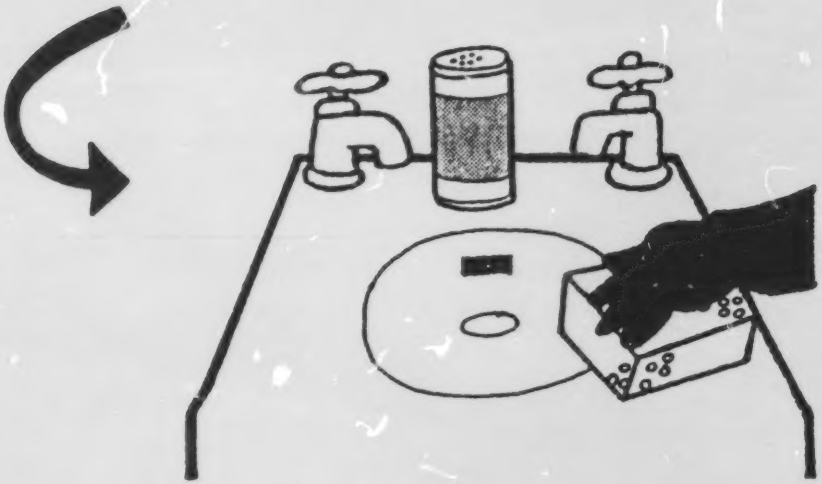
BECAUSE IF YOU LEAVE DIRT, STREAKS, AND WATER SPOTS ON SINKS AND MIRRORS, THE SINKS AND MIRRORS WILL NOT BE SANITARY.

BY CLEANING REST ROOM SINKS AND MIRRORS, YOU KEEP THEM SANITARY.

JOB STEPS

1. COLLECT ALL EQUIPMENT AND GO TO YOUR WORK AREA.

2. POUR SOME SCOURING POWDER INTO EACH SINK AND SCRUB WITH A DAMP SPONGE. RINSE SPONGE WITH WATER AND SQUEEZE OUT EXCESS SOAP AND WATER.

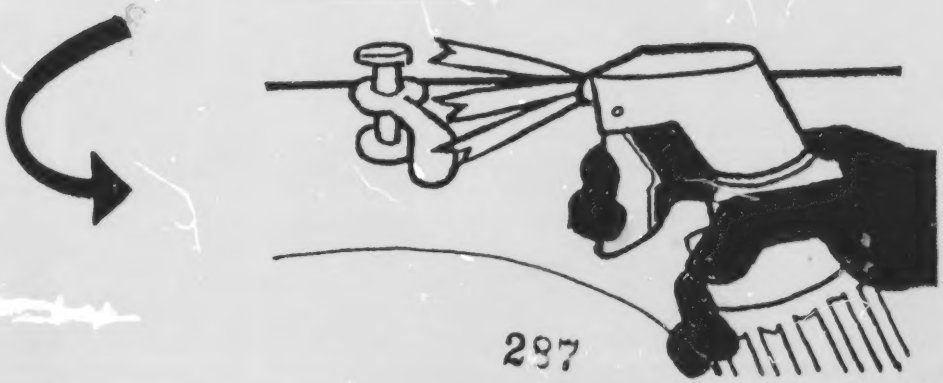


3. RUB SINK AGAIN WITH DAMP SPONGE.

JOB STEPS

4. WIPE DRY WITH A CLEAN WIPING CLOTH.

5. SPRAY SOME ALL - PURPOSE CLEANER ON TOP AND SIDES OF SINK, AND THEN ON FAUCET AND FAUCET HANDLES. WIPE DRY WITH A CLEAN WIPING CLOTH.



WORD GUIDE

DISPENSER - A CONTAINER WHICH HOLDS SUPPLIES LIKE SOAP, TOWELS, AND CUPS.

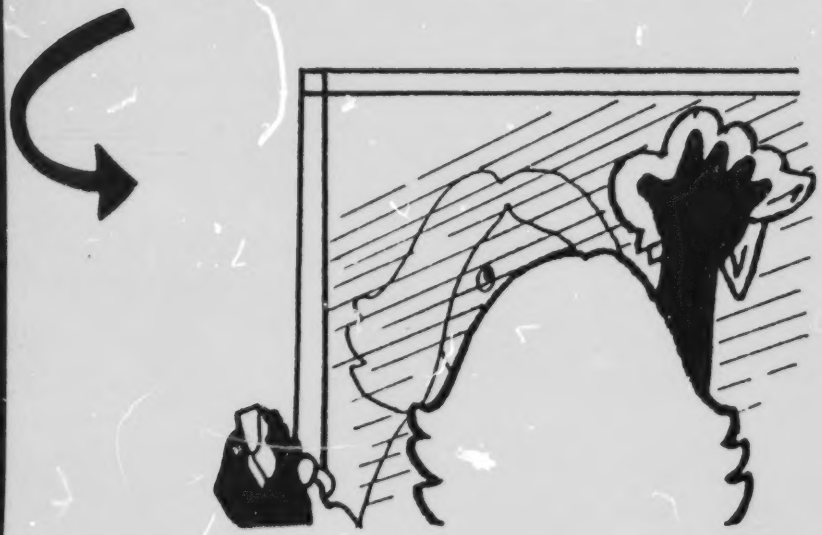
JOB STEPS

6. IF SINKS ARE CLEAN BUT STILL SHOW STREAKS OR WATER SPOTS, SPRAY WITH ALL - PURPOSE CLEANER AND WIPE DRY WITH A CLEAN WIPING CLOTH.

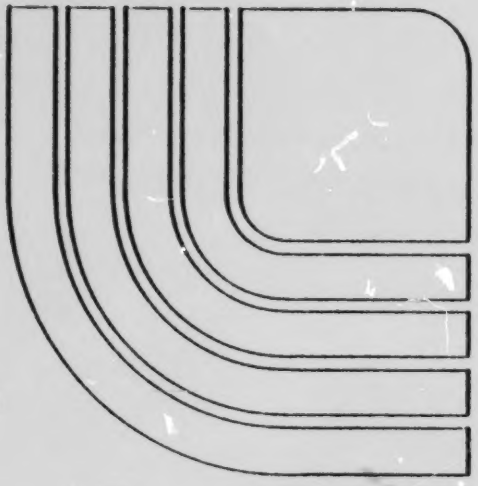
7. SPRAY EACH SOAP DISPENSER WITH ALL - PURPOSE CLEANER. WIPE DRY WITH A CLEAN WIPING CLOTH. BE CAREFUL NOT TO SPRAY WALLS.

JOB STEPS

8. SPRAY ALL MIRRORS WITH GLASS CLEANER. WIPE DRY WITH A CLEAN WIPING CLOTH.



9. RETURN ALL EQUIPMENT. BE SURE ALL EQUIPMENT IS CLEANED.



building maintenance & engineering

unit: REST ROOMS

capital area career center

module: 2201 03 003 7 date: 1/77 level:

skill title: TOILETS AND URINALS

developed & written by: A. STEINBERG

visuals by: SHERRI BAKER

WORD GUIDE

SANITIZE - TO FREE FROM DIRT AND BACTERIA.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO CLEAN AND SANITIZE REST ROOM TOILETS AND URINALS.

AND IN ORDER TO DO THIS YOU WILL NEED:

RUBBER GLOVES
CLEAN WIPING CLOTHS
HAND MIRROR
ALL - PURPOSE CLEANER DISINFECTANT
A TOILET BOWL SWAB
A RUBBER PLUNGER

3

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CLEANED AND SANITIZED ALL REST ROOM TOILETS AND URINALS SO NO SPOTS OR STAINS ARE SHOWING AND THERE IS NO ODOR.

A TAPE OF THIS MODULE IS AVAILABLE

WORD GUIDE

DISINFECTING - CLEANING TO DESTROY HARMFUL GERMS.

INFORMATION

WHY DO YOU CLEAN AND SANITIZE REST ROOM TOILETS AND URINALS?

BECAUSE DIRTY TOILETS AND URINALS COLLECT GERMS, STAINS, SPOTS AND ODORS WHICH MAKE THEM UNSANITARY.

BY CLEANING AND DISINFECTING TOILETS AND URINALS, YOU CAN KEEP THEM CLEAN AND SAFE FOR USE.

INFORMATION

A SANITIZED TOILET OR URINAL IS ONE THAT _____.

A. HAS JUST BEEN PAINTED.
B. HAS JUST BEEN POLISHED.
C. HAS JUST BEEN BOILED.
D. HAS JUST BEEN CLEANED AND DISINFECTED.

HOPE YOU PICKED "D".

JOB STEPS

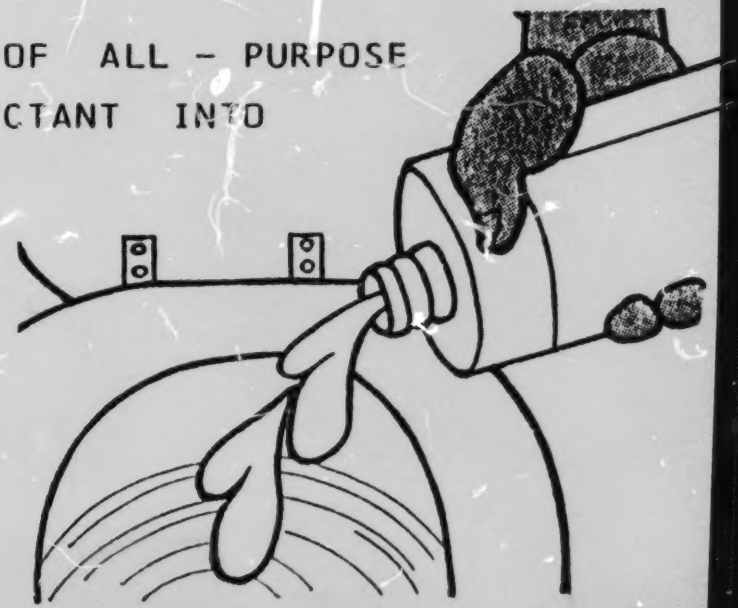
CLEANING TOILETS

1. COLLECT ALL EQUIPMENT AND GO TO YOUR WORK AREA. USE EQUIPMENT CHECKLIST TO BE SURE YOU HAVE EVERYTHING YOU NEED.

2. PUT ON RUBBER GLOVES.

3. FLUSH EACH TOILET.

4. POUR 2 OUNCES OF ALL - PURPOSE CLEANER - DISINFECTANT INTO TOILET BOWL.

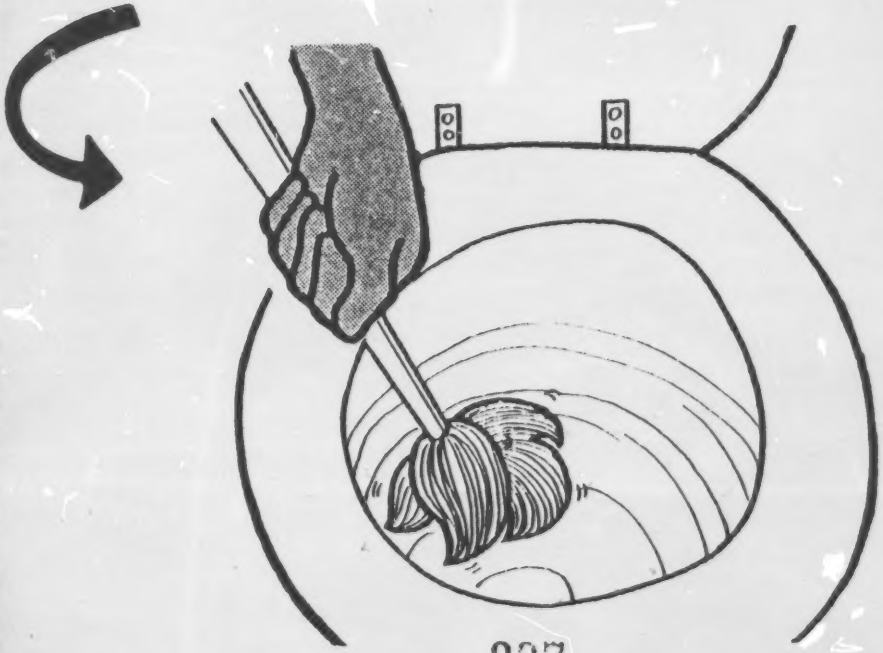


WORD GUIDE

SWAB - A BIT OF SPONGE, CLOTH OR COTTON ATTACHED TO A STICK. USED FOR CLEANING.

JOB STEPS

5. USING BOWL SWAB, SCRUB THE ENTIRE INSIDE AREA. GIVE SPECIAL ATTENTION TO THE UNDERSIDE OF THE RIM.

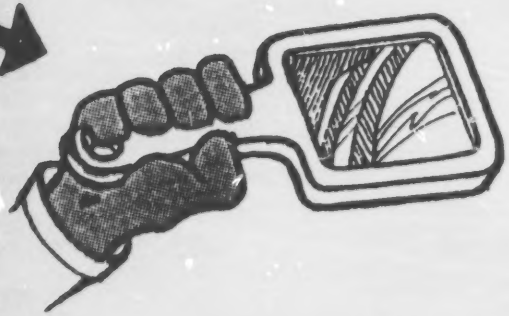


WORD GUIDE

FIXTURE - SOMETHING WELL - ATTACHED TO SOMETHING ELSE, LIKE TOILET HANDLE.

JOB STEPS

6. CHECK THE UNDERSIDE OF RIM WITH A HAND MIRROR TO MAKE SURE YOU HAVE LEFT NO STAINS OR SPOTS.



7. WET A CLEAN WIPING CLOTH WITH ALL - PURPOSE CLEANER - DISINFECTANT. CLEAN TOILET SEAT AND OUTSIDE AREA OF BOWL. THEN CLEAN ALL FIXTURES.

TURN PAGE →

JOB STEPS

8. USING CLEAN, DRY, WIPING CLOTH, WIPE DRY THE TOILET SEAT, OUTSIDE OF BOWL AND FIXTURES.

9. RETURN ALL EQUIPMENT. BE SURE ALL EQUIPMENT IS CLEANED.

CLEANING URINALS

1. PUT ON RUBBER GLOVES.

2. FLUSH EACH URINAL.

3. TAKE CIGARETTES, GUM, PAPER AND OTHER THINGS OUT OF THE BOTTOM OF THE URINAL. THROW THEM INTO THE WASTE BASKET.

4. FLUSH EACH URINAL AGAIN.

building maintenance & engineering

unit: CARPET CARE

capital area career center

module: 2201 05 001 7 date: 12/76 level: 2

skill title: SHAMPOOING CARPETS (DRY FOAM)

developed & written by: DWIGHT SMITH

visuals by: SANDRA STARNAMAN

WORD GUIDE

DRY FOAM SHAMPOO - CARPET CLEANER THAT DOES NOT SOAK THE CARPET OR RUG.

PILE - THE YARNS OF A CARPET.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

TO SHAMPOO A CARPET WITH THE DRY FOAM METHOD.

AND IN ORDER TO DO THIS YOU WILL NEED:

SELF - PROPELLED DRY FOAM SHAMPOO MACHINE
DRY FOAM SHAMPOO
12 QUART PAIL
SHORT BRISTLED BRUSH
UPRIGHT VACUUM CLEANER
CARPET BRUSH
WET VACUUM

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CLEANED ALL THE DIRT FROM A CARPET AND THE PILE HAS BEEN LIFTED TO THE SAME HEIGHT.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

THE PILE OF A CARPET IS _____.

A. A HEAP OF DIRT ON A CARPET.
B. THE YARNS OF THE CARPET.
C. THE BACKING OF A CARPET.
D. THE COLOR OF A CARPET.

ANSWER: B

WHY DRY FOAM SHAMPOO A CARPET?

TO REMOVE EMBEDDED DIRT AND RAISE THE PILE. THIS HELPS THE CARPET LOOK BETTER AND LAST LONGER.

INFORMATION

NOW DO:

READ THE INFORMATION ABOVE.
GET ALL THE EQUIPMENT LISTED ON PAGE 1.

USE AN EQUIPMENT CHECKLIST FOR THE CARPET CARE UNIT.

AFTER YOU HAVE ALL THE EQUIPMENT TURN THE PAGE AND BEGIN THE JOB STEPS.

JOB STEPS

1. CHECK THE TIME. THE CARPET WILL NEED 12 HOURS TO DRY BEFORE PEOPLE CAN WALK ON IT.

2. BRING ALL THE EQUIPMENT AT THE WORK AREA.

3. MAKE A MAP OF ALL FURNITURE IN THE ROOM.

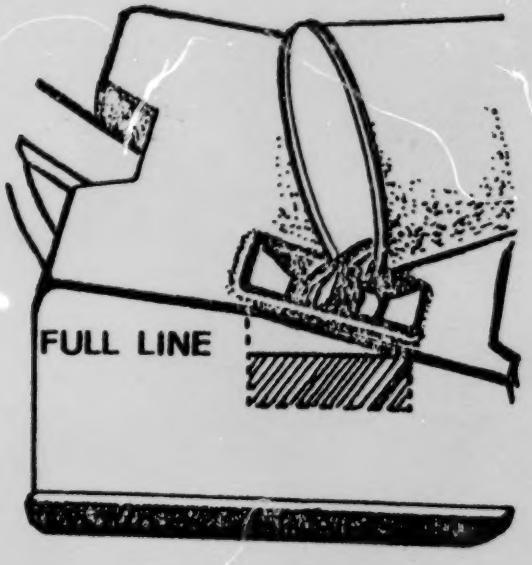
EXAMPLE:

4. MOVE ALL THE FURNITURE AWAY FORM THE AREA YOU WILL SHAMPOO.

5. VACUUM THE CARPET COMPLETELY
(SEE MODULE ON VACUUM CLEANING
2201 05 003 7)

JOB STEPS

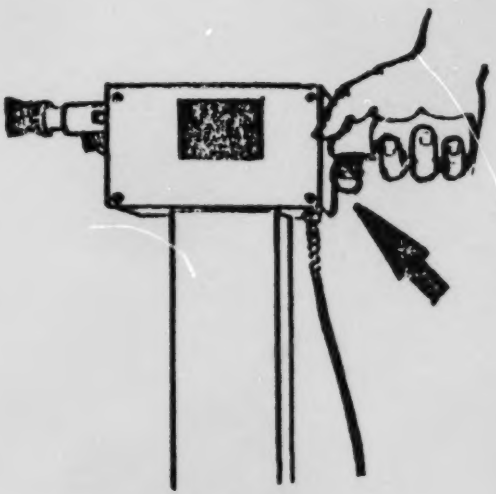
6. FILL PAIL WITH WARM WATER. FILL SHAMPOO MACHINE WITH WARM WATER FROM THE PAIL UP TO "FULL LEVEL". ADD SHAMPOO ACCORDING TO INSTRUCTIONS ON THE PACKAGE.



JOB STEPS

7. ADJUST BRUSH HEIGHT ACCORDING TO DIRECTIONS FROM YOUR INSTRUCTOR.

8. PUT THE MACHINE ALONG THE BASEBOARD OF ONE SIDE OF THE ROOM.



9. PUSH THE "FOAM" BUTTON ON THE RIGHT HANDLE, THEN LET IT GO. THE LONGER YOU HOLD IT IN, THE WETTER YOUR FLOOR. DO NOT MAKE THE FLOOR TOO WET.

JOB STEPS

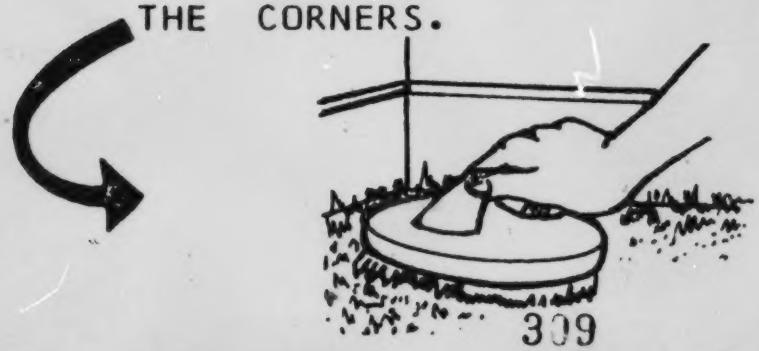
10. PUSH THE "POWER" BUTTON ON THE LEFT HANDLE TO MAKE THE BRUSHES TURN.

11. PUSH THE MACHINE ALONG THE WALL TO THE END OF THE ROOM. LET GO OF THE "POWER" BUTTON.

12. RAISE THE FRONT OF THE MACHINE A FEW INCHES BY PUSHING DOWN ON HANDLES.

13. REPEAT STEPS 9 THROUGH 12 UNTIL YOU HAVE SHAMPOOED THE ENTIRE AREA. BE SURE TO OVERLAP ABOUT 4 INCHES.

14. USE THE SHORT BRISTLED BRUSH TO CLEAN THE CORNERS.



JOB STEPS

15. WET VACUUM THE ENTIRE CARPET.

16. USING THE CARPET BRUSH, RAKE THE PILE UP. RAKE ALL THE CARPET IN THE SAME DIRECTION UNTIL THE PILE IS RAISED.

TURN PAGE →

JOB STEPS

17. CLEAN ALL THE EQUIPMENT AND RETURN IT TO THE STORAGE AREA.

18. THE CARPET MUST DRY FOR 12 HOURS BEFORE USING.

19. ASK YOUR INSTRUCTOR TO INSPECT THE CARPET AREA.

building maintenance & engineering

unit: CARPET CARE

capital area career center

module: 2201 05 002 7 date: 12/76 level: 2

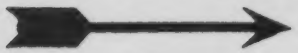
skill title: SHAMPOOING CARPET WITH ROTARY MACHINE

developed & written by: DWIGHT SMITH

visuals by:

313

WORD GUIDE



PILE - THE YARNS OF A CARPET.

ROTARY SHAMPOO TANK - CONTAINER ON SHAMPOO TANK THAT HOLDS CLEANING SOLUTION.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO SHAMPOO A CARPET WITH A ROTARY MACHINE.

AND IN ORDER TO DO THIS YOU WILL NEED:

ROTARY CARPET SHAMPOO MACHINE
WET VACUUM
SHAMPOO
CARPET SPOT CLEANER
10 2" X 2" CARDBOARD PLASTIC
UPRIGHT VACUUM CLEANER
PENCIL AND PAPER

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CLEANED A CARPET, AND THE PILE STANDS UP THE SAME HEIGHT.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

YOU WILL NEED AN EQUIPMENT CHECKLIST FOR THE CARPET CARE UNIT.

QUIZ YOURSELF:

A ROTARY SHAMPOO TANK IS _____.

A. A ROUND ARMY TANK.
B. GREAT FOR WASHING YOUR TANK.
C. A CONTAINER FOR HOLDING CLEANING SOLUTION.
D. FOR SHAMPOOING GOLDFISH.

ANSWER: C

JOB STEPS

1. GET YOUR EQUIPMENT. USE YOUR CHECKLIST TO BE SURE YOU HAVE EVERYTHING YOU WILL NEED. BRING YOUR EQUIPMENT TO THE WORK AREA.

2. MAKE A MAP OF THE FURNITURE IN THE AREA YOU WILL SHAMPOO.

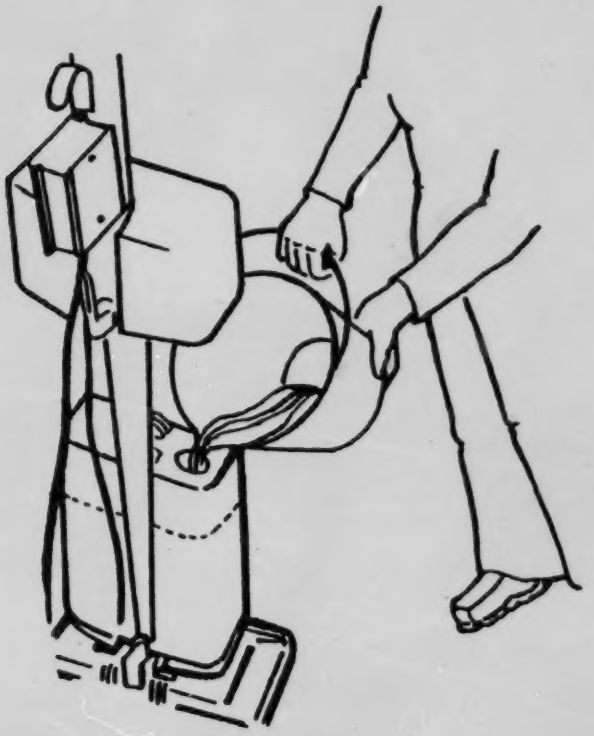
3. MOVE ALL THE FURNITURE OUT OF THE AREA.

4. USE THE SPOT CLEANER ON ANY STAIN YOU CAN SEE (SEE MODULE 2201 05 004 7).

5. VACUUM THE CARPET (SEE MODULE 2201 05 004 7).

JOB STEPS

6. FILL THE ROTARY SHAMPOO TANK 3/4 FULL WITH WARM WATER. ADD SHAMPOO ACCORDING TO DIRECTIONS ON THE PACKAGE LABEL.



7. WHEEL THE MACHINE TO THE FURTHEST POINT FROM YOUR EXIT. PLUG IT IN.

JOB STEPS

8. PULL UP ON THE SHAMPOO RELEASE HANDLE AND LET GO. TURN ON THE MACHINE. FOAM IS NOW BEING MADE.

9. GUIDE THE MACHINE FROM SIDE TO SIDE. PULL UP ON THE SHAMPOO RELEASE HANDLE AND LET GO WHEN YOU NEED MORE FOAM. DO NOT SOAK THE CARPET OR IT WILL TAKE TOO LONG TO DRY.

10. DO JOB STEP 8 UNTIL YOU HAVE SHAMPOOED THE ENTIRE CARPET.

11. TAKE THE ROTARY MACHINE OUT OF THE AREA AND BRING IN THE WET VACUUM. WET VACUUM THE ENTIRE AREA.

12. RETURN THE FURNITURE TO ITS PROPER LOCATION ACCORDING TO YOUR MAP.

JOB STEPS

PUT CARDBOARD OR PLASTIC SQUARES UNDER THE LEGS OF THE FURNITURE TO AVOID RUST STAINS.

13. RETURN YOUR EQUIPMENT TO THE STORAGE AREA AND CLEAN THE EQUIPMENT.

14. ASK YOUR INSTRUCTOR TO CHECK YOUR WORK.

building maintenance & engineering

unit: POWER TOOLS

capital area career center

module: 2201 20 001 7 date: 2/77 level:

skill title: OPERATION OF SABRE SAW

developed & written by: MIKE POLEN

visuals by: BILL DRAPER

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO USE A SABRE SAW

AND IN ORDER TO DO THIS YOU WILL NEED:

TRI - SQUARE
PIECE OF PLYWOOD
PENCIL
SABRE SAW

WE WILL KNOW YOU CAN DO IT WHEN:

FOLLOWING SAFETY INSTRUCTIONS, YOU HAVE CUT THE PLYWOOD ALONG THE CURVED LINES AND THE STRAIGHT CORNERS.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

CAUTION: BEFORE YOU USE ANY TOOLS, ESPECIALLY ELECTRIC, BE SURE THAT YOUR INSTRUCTOR OR ANOTHER STUDENT IS THERE TO HELP YOU. WEAR YOUR SAFETY GLASSES.

WORD GUIDE

OBSTRUCTION - SOMETHING UNDER THE PLYWOOD; SUCH AS THE TABLE OR BENCH.

****

CAUTION!

A. NEVER REMOVE THE SAW FROM A CUT UNTIL BLADE HAS STOPPED MOVING.

B. REMOVE ELECTRICAL PLUG FROM SOCKET WHEN MAKING ADJUSTMENTS OR CHANGING BLADES.

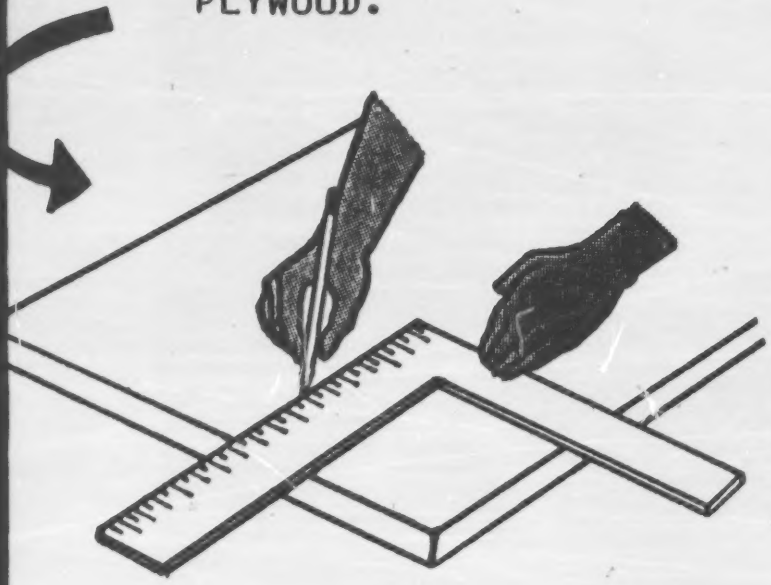
****

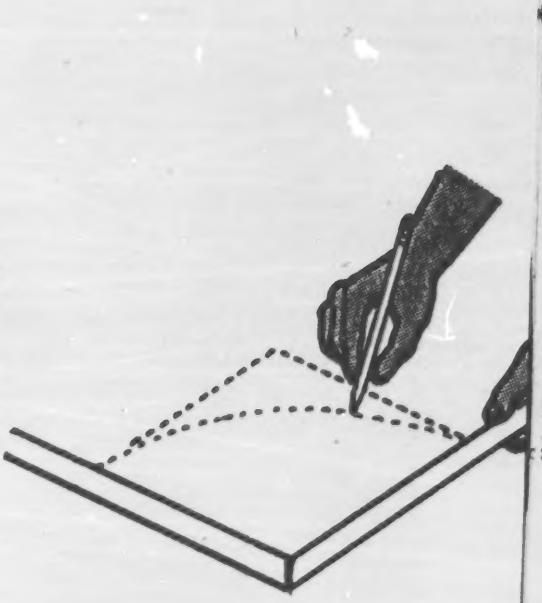
JOB STEPS

1. PLACE PLYWOOD ON TABLE SO THAT YOUR CUTTING AREA IS FREE FROM ANY OBSTRUCTION.

JOB STEPS

2. WITH A PENCIL AND TRI - SQUARE (T-SQUARE) DRAW A SQUARE CORNER ON PLYWOOD.

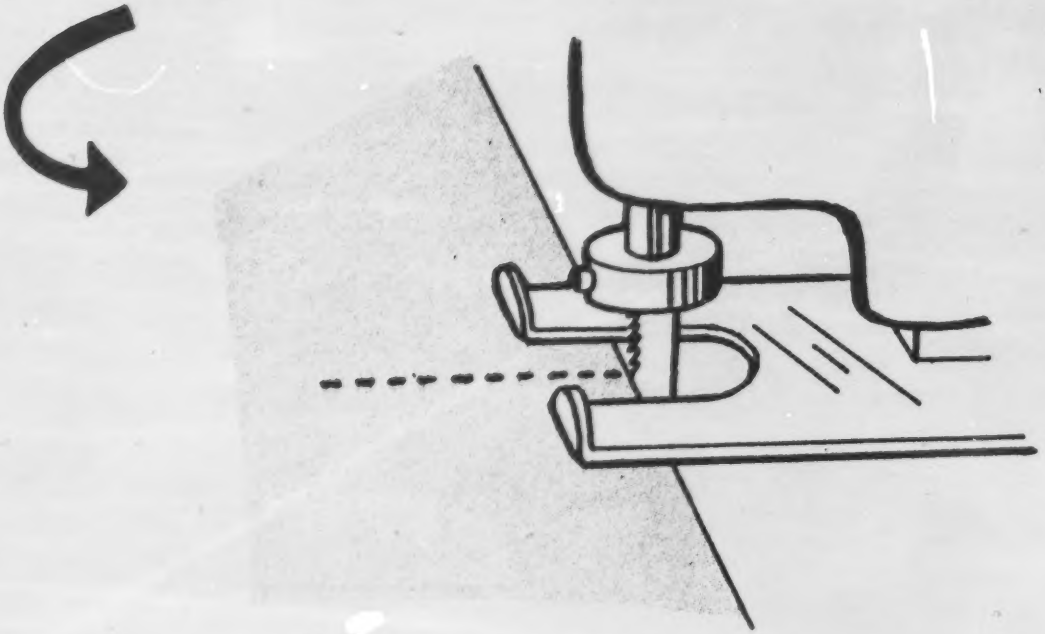




3. THEN DRAW A CURVED LINE BETWEEN THE TWO ENDS OF YOUR SQUARE CORNER.

JOB STEPS

4. PLACE FRONT OF SAW - STAND FLAT ON THE PLYWOOD. LINE UP BLADE WITH THE PENCIL LINE THROUGH THE VIEWING GAP.



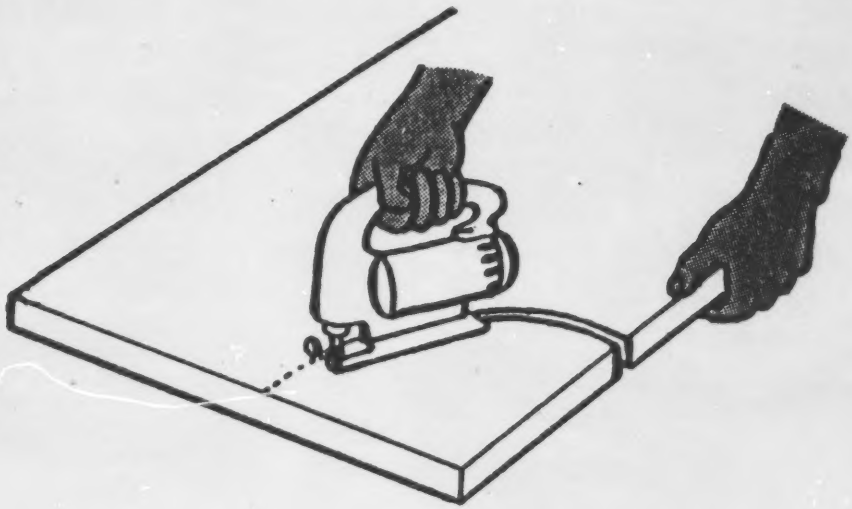
5. PUT ONE HAND OR A HEAVY WEIGHT ON THE PLYWOOD TO HOLD IT STEADY.

WORD GUIDE

DOWN PRESSURE - PRESS DOWN ON SAW.

JOB STEPS

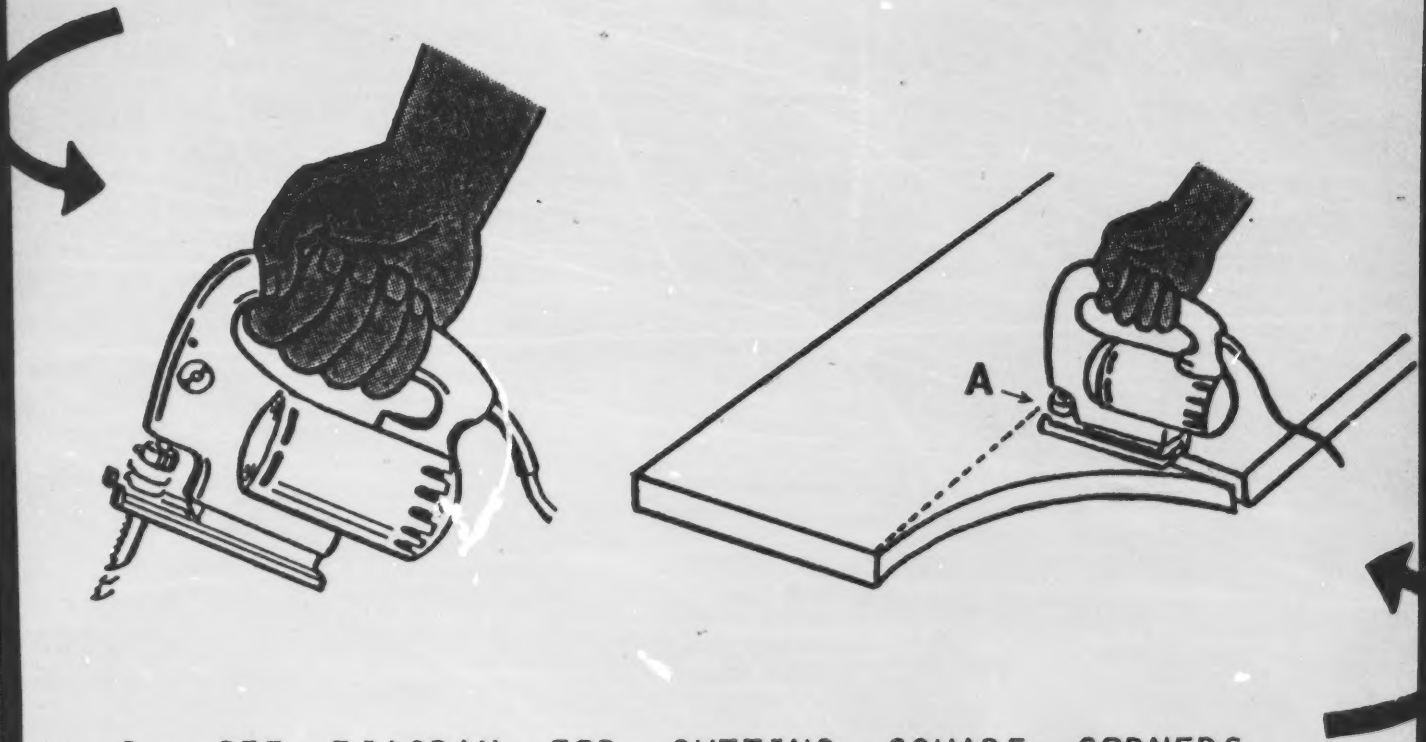
6. TURN SAW SWITCH ON AND MOVE THE SAW SLOWLY FORWARD, KEEPING BLADE ON CURVED PENCIL LINE.



7. KEEP DOWN PRESSURE ON THE SAW SO IT WON'T JUMP UP AND DOWN ON MATERIAL.

JOB STEPS

8. WHEN COMPLETE CUT IS MADE. DO NOT LAY SAW DOWN UNTIL IT HAS STOPPED MOVING.



9. SEE DIAGRAM FOR CUTTING SQUARE CORNERS. CUT ALONG LINE UNTIL YOU REACH ANGLE OF SQUARE (POINT A).

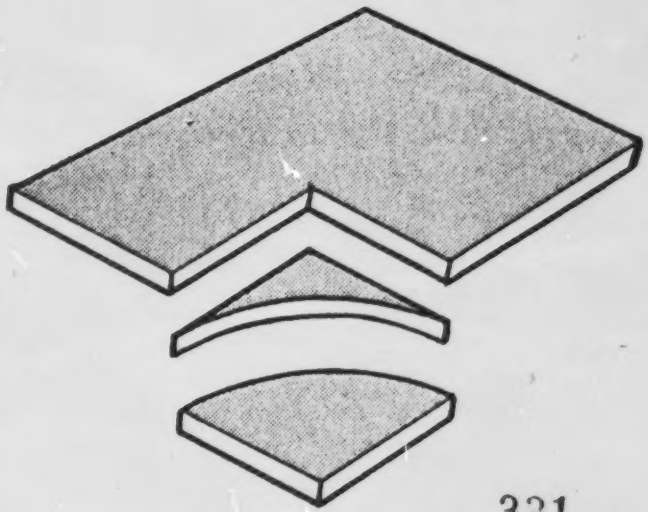
TURN PAGE →

JOB STEPS

10. STOP THE SAW. WHEN SAW IS STOPPED, PULL SAW OUT AND CUT ALONG OTHER LINE UNTIL YOU REACH ANGLE OF SQUARE.

11. UNPLUG YOUR SAW.

12. YOUR PLYWOOD PIECES SHOULD LOOK LIKE THE FIGURES BELOW. TAKE ALL THREE PIECES TO YOUR INSTRUCTOR.



building maintenance & engineering

unit: POWER AND HAND TOOLS

capital area career center

module: 2201 20 012 7 date: 4/77 level:

skill title: HAND TOOL IDENTIFICATION

developed & written by: ROY HASKE

visuals by: CHUCK KNOCK

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO IDENTIFY HAND TOOLS.

AND IN ORDER TO DO THIS YOU WILL NEED:

ALL TOOLS LISTED IN THIS MODULE.

WE WILL KNOW YOU CAN DO IT WHEN:

YOU ARE ABLE TO TELL THE INSTRUCTOR THE NAME OF EACH TOOL WITH NO ERRORS.

A TAPE OF THIS MODULE IS AVAILABLE.

INFORMATION

1. STUDY THE PAGES IN THIS MOD UNTIL YOU CAN NAME THE TOOLS IN ANY ORDER THE INSTRUCTOR ASKS YOU TO.

2. TO PRACTICE, ASK YOUR INSTRUCTOR TO GIVE YOU THE FLASH CARDS. LOOK AT EACH DRAWING AND SAY THE NAME TO YOURSELF. THEN CHECK YOUR ANSWER ON THE BACK OF THE CARD. MIX THE CARDS AND TRY AGAIN. WHEN YOU CAN NAME ALL THE TOOLS IN ANY ORDER, THEN TELL YOUR INSTRUCTOR YOU ARE READY FOR THE TEST.

JOB STEPS

1. HAMMER

KEEP A ROUNDED EDGE ON THE HAMMER HEAD.

2A. SCREWDRIVER

KEPT STRAIGHT AND FLAT AT SCREW END.

2B. PHILLIPS SCREWDRIVER

JOB STEPS

3. OPEN END WRENCH

4. BOX END WRENCH

5. ADJUSTABLE WRENCH

DROP OF OIL ONCE A MONTH.

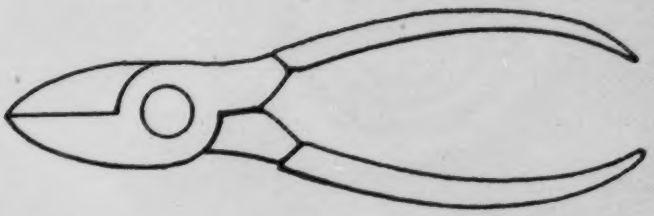
6A. PLIERS

OIL ONCE A MONTH.

JOB STEPS

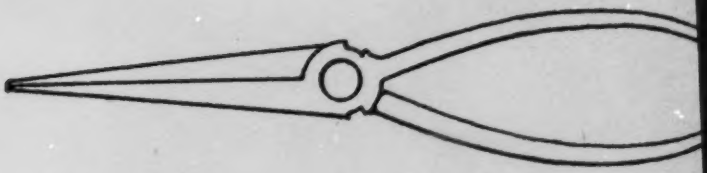
6B. DIAGONAL PLIERS

OIL ONCE A MONTH.



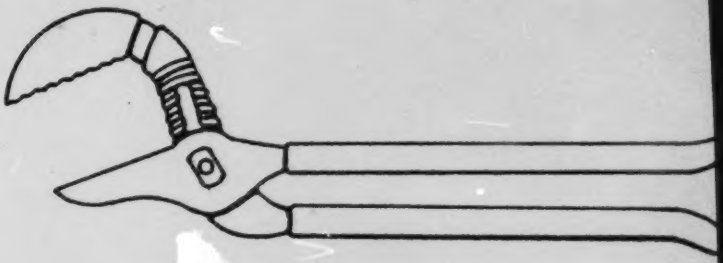
7. NEEDLE NOSE PLIERS

OIL ONCE A MONTH.



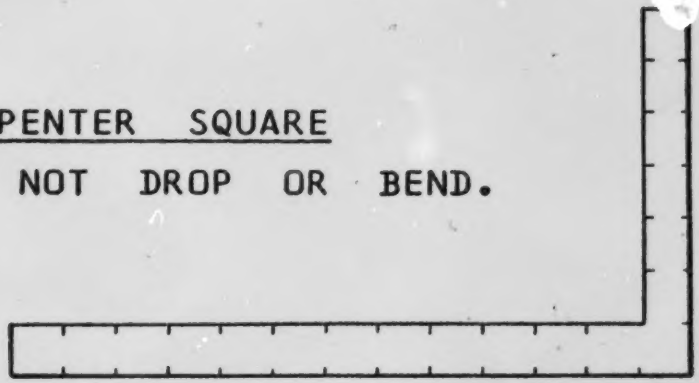
8. CHANNEL LOCK PLIERS

OIL ONCE A MONTH.



9. CARPENTER SQUARE

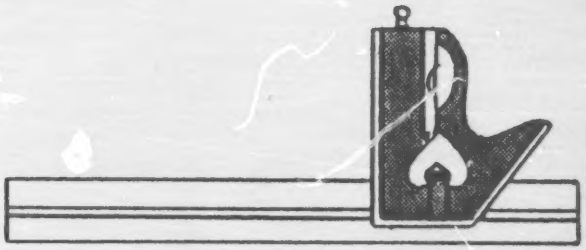
DO NOT DROP OR BEND.



JOB STEPS

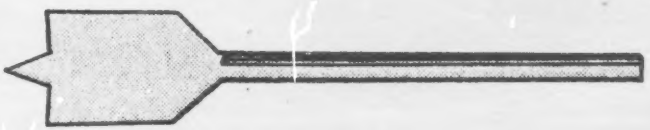
10. COMBINATION SQUARE

DO NOT DROP OR BEND.



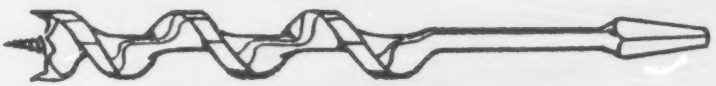
11A. DRILL BIT (WOOD)

WIPE WITH AN OILY RAG WHEN NOT USED OFTEN.



11B. DRILL BIT (WOOD)

WIPE WITH AN OILY RAG WHEN NOT USED OFTEN.



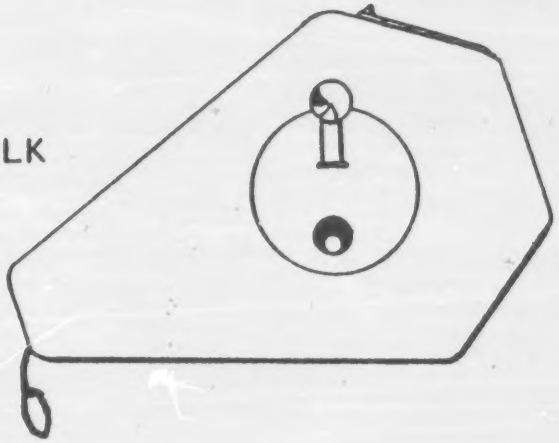
12. DRILL BIT (METAL)

WIPE WITH AN OILY RAG WHEN NOT USED OFTEN.

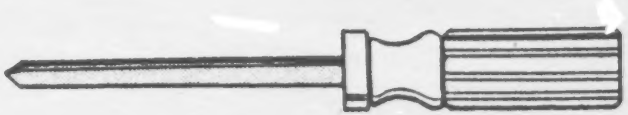
JOB STEPS

13. DRILL BIT (EXPANSIONWOOD)
WIPE WITH AN OILY RAG WHEN NOT USED OFTEN.

14. CHALK LINE
KEEP A SUPPLY OF CHALK DUST IN CASE.



15. CENTER PUNCH
KEEP A POINTED END.

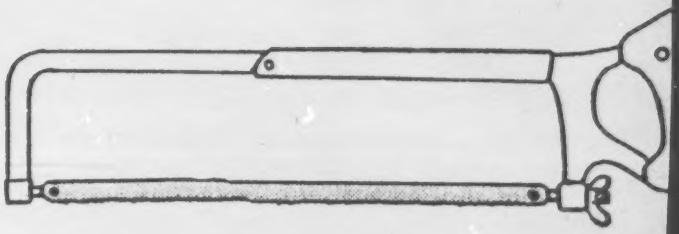


16. CROSSCUT SAW
KEEP SHARP AND OILED.

JOB STEPS

17. RIP SAW
KEEP SHARP AND OILED.

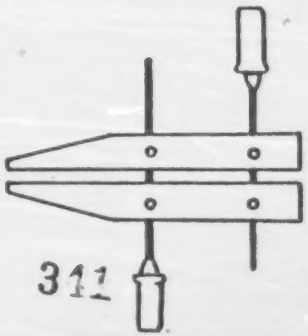
18. HACK SAW
KEEP SHARP AND OILED.



19. KEYHOLE SAW
KEEP SHARP AND OILED.

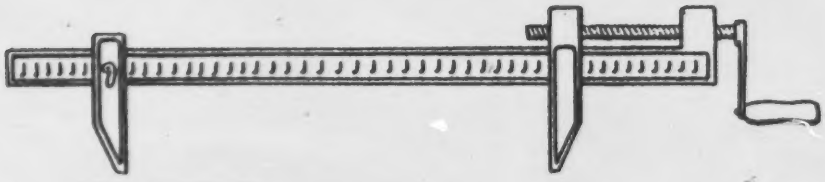
20. CARPENTER LEVEL
DO NOT DROP.

21. WOOD CLAMPS
OIL.

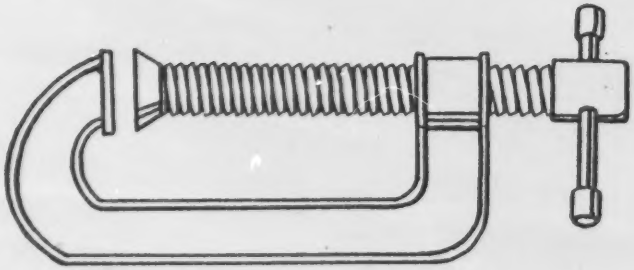


JOB STEPS

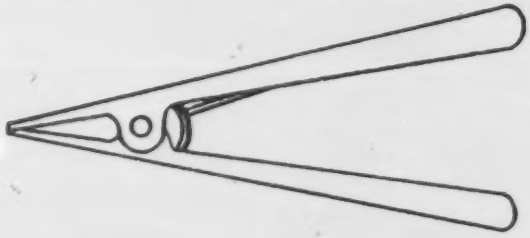
22. METAL CLAMPS
OIL.



23. "C" CLAMP
OIL.

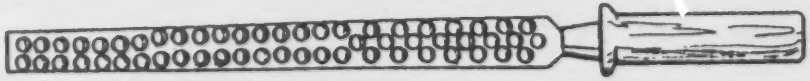


24. SPRING CLAMP
OIL.



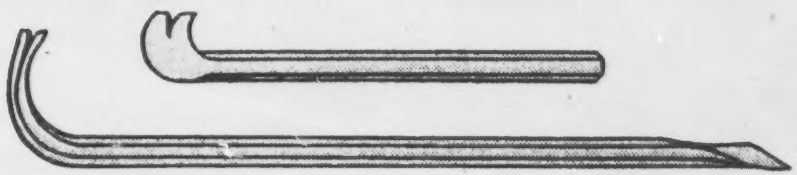
25. WOOD FILE
KEEP CLEAN.

26. RASP (WOOD)
KEEP CLEAN.

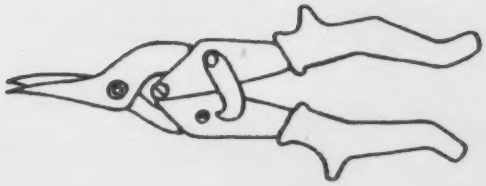


JOB STEPS

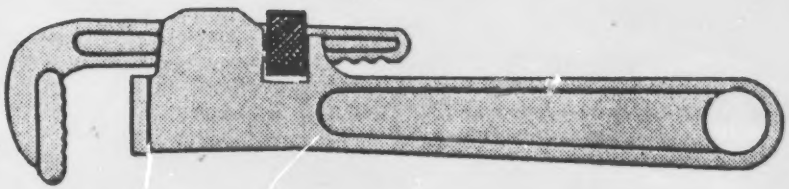
27. WRECKING BAR



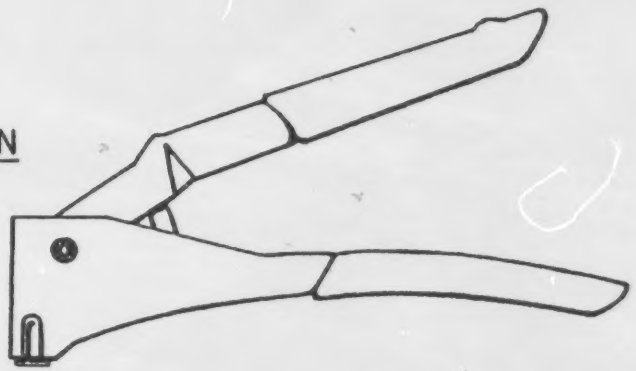
28. TIN SNIPS
OIL.



29. PIPE WRENCH
OIL.

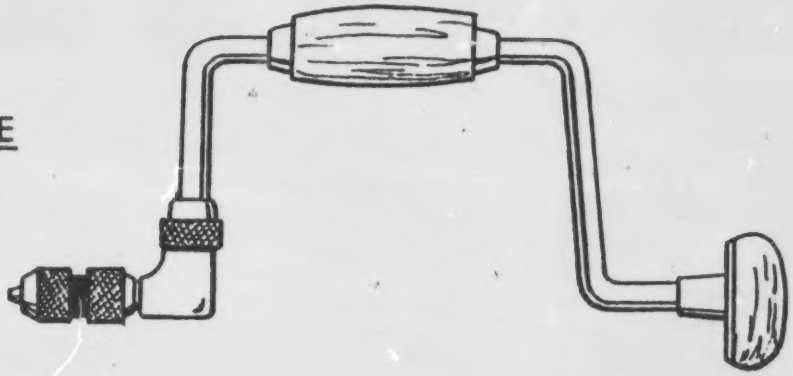


30. POP - RIVOT GUN
OIL.

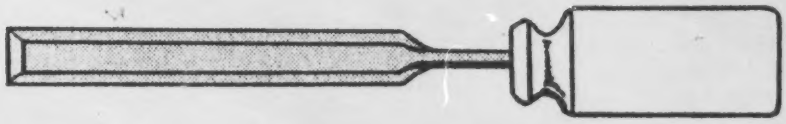


JOB STEPS

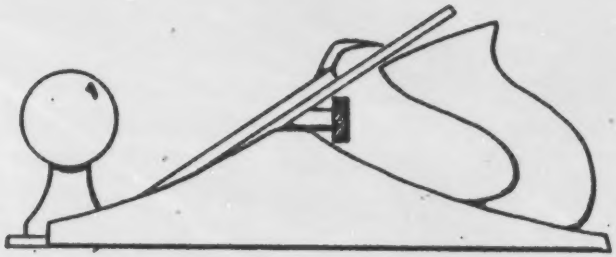
31. BRACE
OIL.



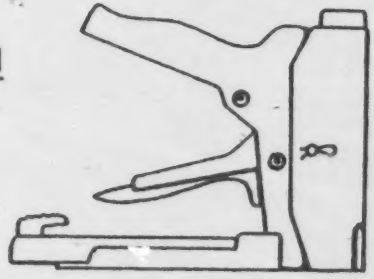
32. WOOD CHISEL
KEEP SHARP.



33. WOOD PLANE
KEEP SHARP.



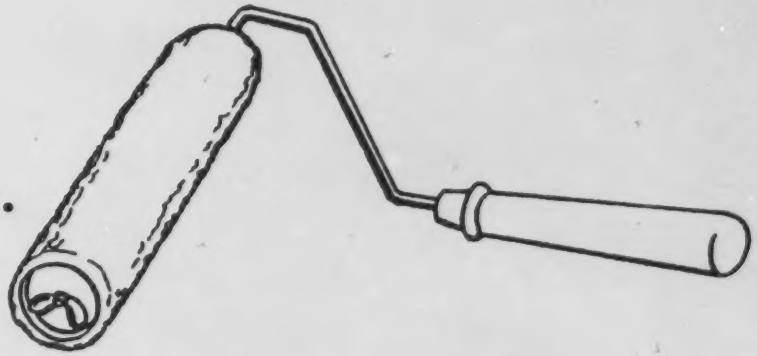
34. STAPLE GUN
OIL.



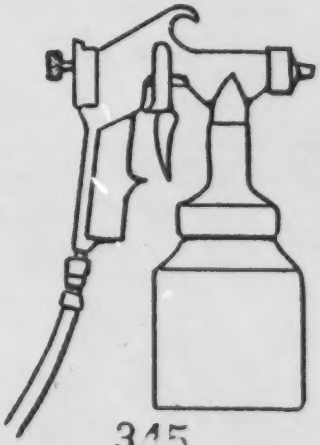
JOB STEPS

35. PAINT BRUSH
KEEP VERY CLEAN.

36. PAINT ROLLER
KEEP VERY CLEAN.

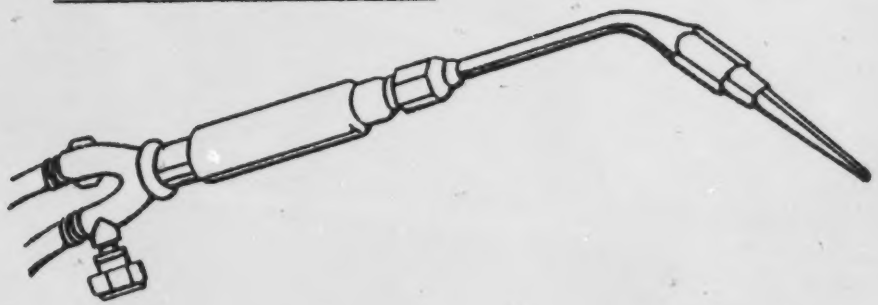


37. PAINT SPRAY GUN
KEEP VERY CLEAN.

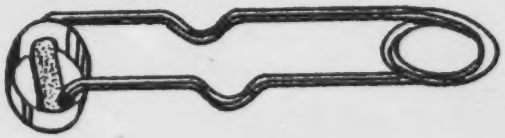


JOB STEPS

38. ACETYLENE TORCH



39. STRIKER



building maintenance & engineering

unit: CABINET CONSTRUCTION

capital area career center

module: 2201 21 003 7 date: 2/77 level: 1

skill title: CONSTRUCT A CABINET

developed & written by: MIKE POLEN

visuals by: BILL DRAPER

WORD GUIDE

SQUARE - STRAIGHT AND EVEN.

ASSEMBLE - PUT TOGETHER.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

HOW TO ASSEMBLE THE CABINET PARTS INTO A COMPLETE CABINET.

AND IN ORDER TO DO THIS YOU WILL NEED:

HAMMER
SCREWDRIVER
CARPENTER'S SQUARE
ELECTRIC HAND DRILL
SCREWMATE TOOL
SCREWS
NAILS AND GLUE
LAYOUT DRAWING
PARTS

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE FASTENED TOGETHER ALL THE CABINET PARTS SO THAT THE CABINET IS SQUARE AND THE JOINTS ARE SOLID.

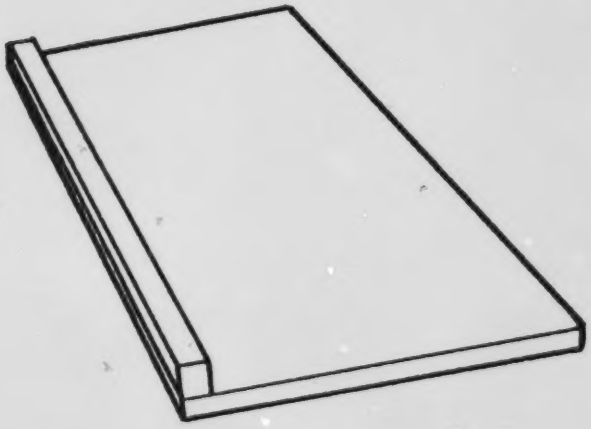
A TAPE OF THIS MODULE IS AVAILABLE.

WORD GUIDE

FLUSH - EVEN AND STRAIGHT AT EDGES AND JOINTS.

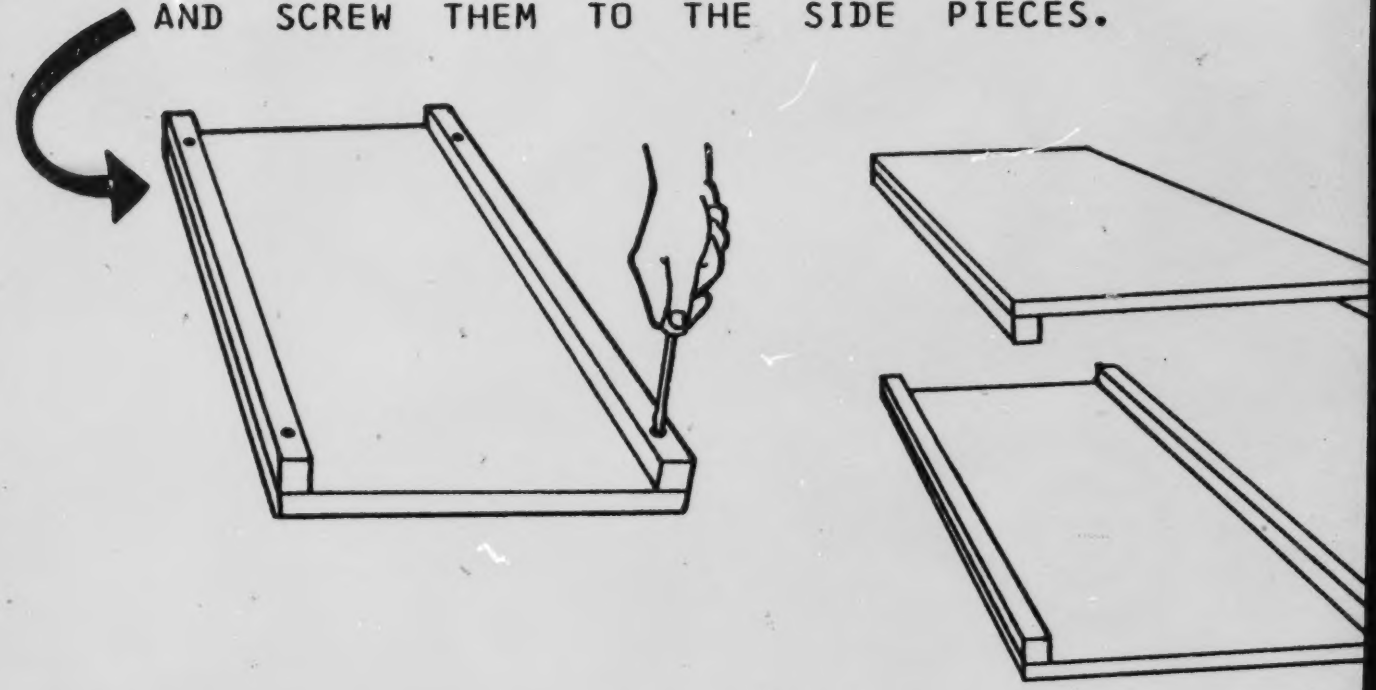
JOB STEPS

1. PLACE A 3/4 INCH SQUARE PIECE OF WOOD ON THE TOP EDGE OF BOTH SIDE PIECES. MUST BE FLUSH ON TOP. BE SURE THE 3/4 INCH PIECES ARE NO DEEPER THAN THE SIDE PIECES.



JOB STEPS

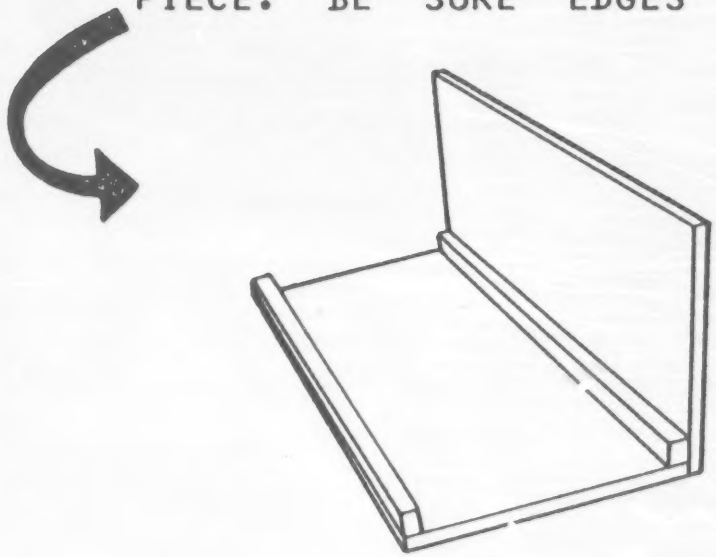
2. GLUE ONE SIDE OF THE 3/4 INCH PIECES AND SCREW THEM TO THE SIDE PIECES.



3. DO THE SAME WITH 2 MORE 3/4 INCH SQUARE PIECES ON THE BOTTOM EDGE OF THE SIDE PIECES.

JOB STEPS

4. PLACE THE TOP PIECE ON A TABLE AND PUT ONE SIDE PIECE ON THE EDGE OF THE TOP PIECE. BE SURE EDGES ARE FLUSH.

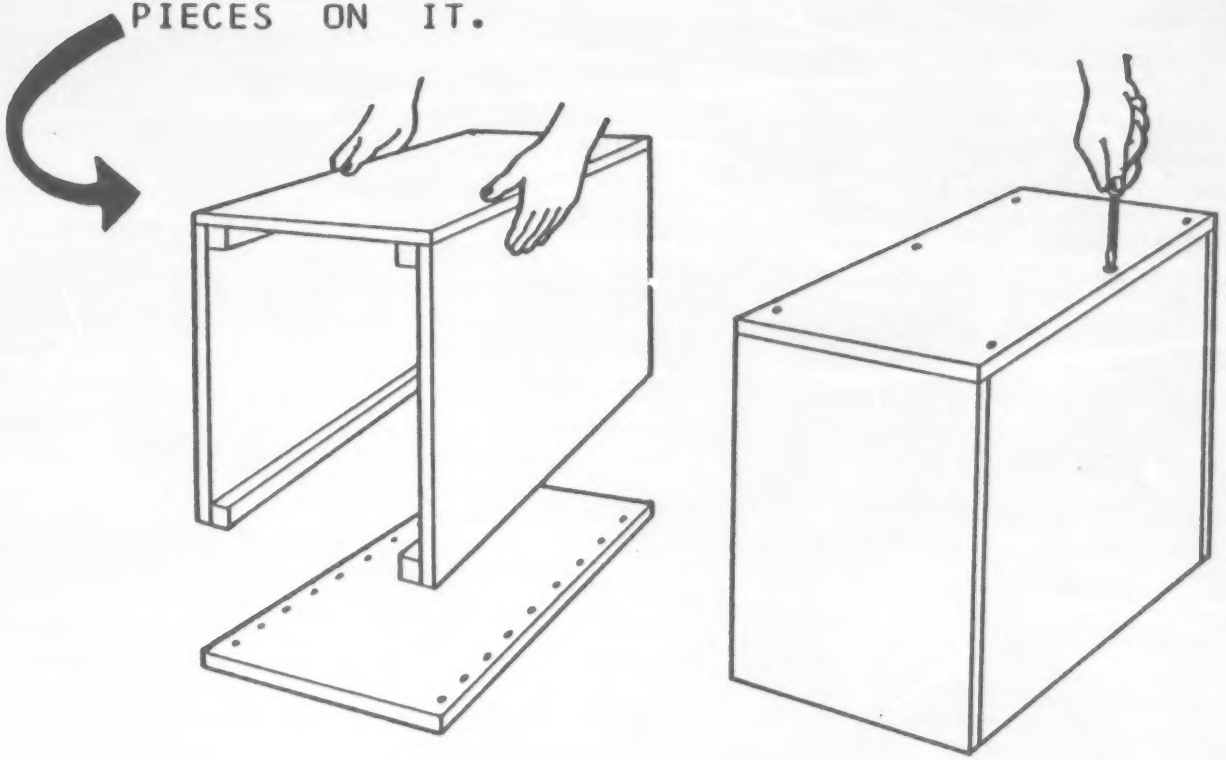


5. GLUE AND SCREW THE TOP AND SIDE PIECES TOGETHER ON THE 3/4 INCH PIECE.

6. DO THE SAME WITH THE OTHER SIDE PIECE.

JOB STEPS

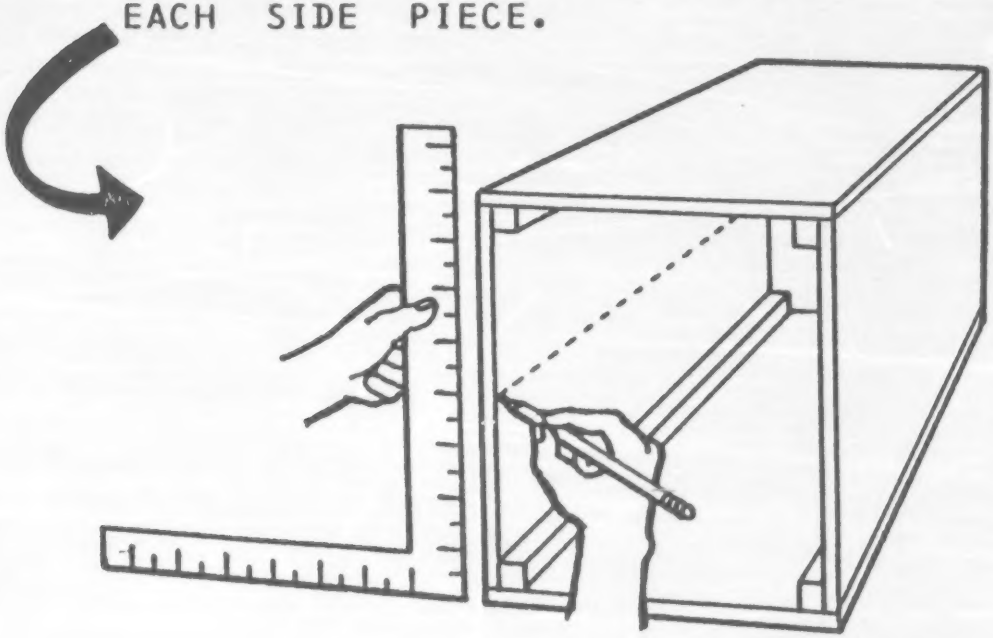
7. PLACE THE BOTTOM SHELF PIECE ON THE TABLE, AND SET THE TOP AND SIDE PIECES ON IT.



8. GLUE AND SCREW THE BOTTOM PIECE TO THE 3/4 INCH PIECES ON EACH SIDE.

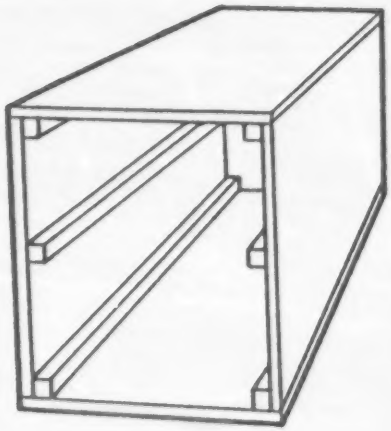
JOB STEPS

9. MEASURE HALF - WAY UP THE SIDES AND DRAW A LINE ACROSS THE INSIDE OF EACH SIDE PIECE.



JOB STEPS

10. GLUE AND SCREW A 3/4 INCH SQUARE PIECE JUST BELOW THE LINE YOU HÁVE DRAWN.

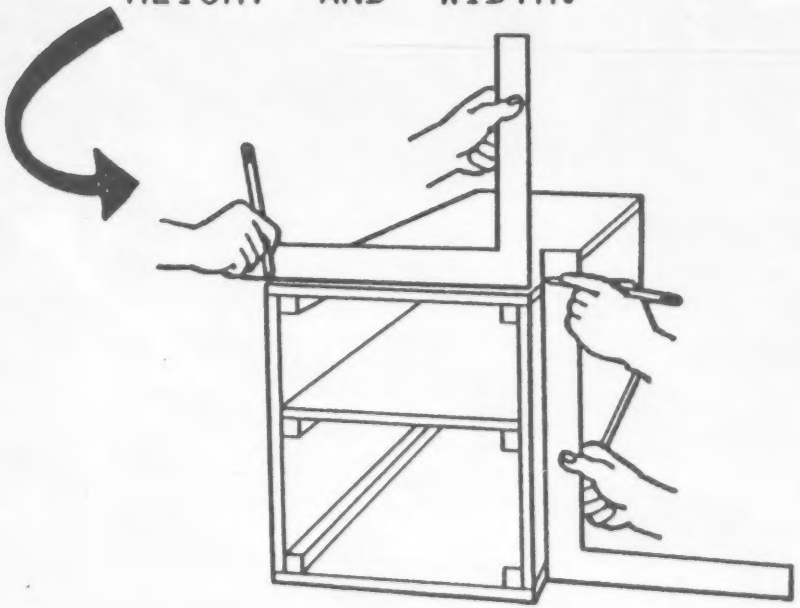


11. MEASURE THE DISTANCE BETWEEN YOUR TWO SIDES (FROM THE INSIDE), AND CUT YOUR MIDDLE SHELF.

JOB STEPS

12. PUT MIDDLE SHELF ON THE 3/4 INCH SIDE PIECES. GLUE AND SCREW TOGETHER.

13. MEASURE THE BACK OF YOUR CABINET, FROM THE OUTSIDE EDGES. WRITE DOWN THE HEIGHT AND WIDTH.



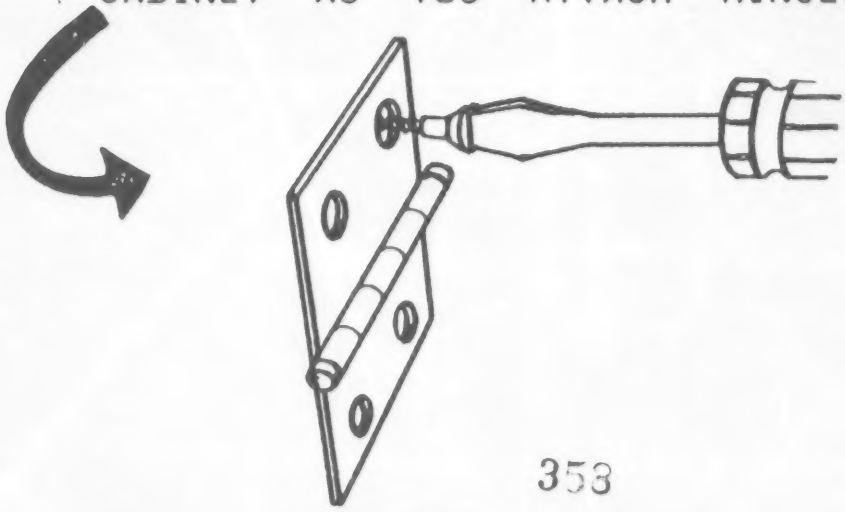
14. CUT YOUR BACK SIDE.

JOB STEPS

15. PLACE CABINET FRONT - DOWN ON FLOOR AND PUT BACK SIDE ON TOP OF IT. SCREW BACK ONTO CABINETS BY PUTTING SCREWS INTO END OF EACH 3/4 INCH SQUARE PIECES.

16. ASK YOUR INSTRUCTOR IF YOU ARE READY TO PUT DOOR ON.

17. SCREW HINGES INTO SIDE PIECE. BE SURE TO HOLD THE DOOR PIECE FLUSH AGAINST CABINET AS YOU ATTACH HINGES.



JOB STEPS

18. CHECK TO MAKE SURE ALL SCREWS ARE TIGHTENED DOWN.

building maintenance & engineering

unit: CONSTRUCT CABINETS

capital area career center

module: 2201 21 004 7 date: 2/77 level:

skill title: FABRICATE DOORS -. INSET

developed & written by: MIKE POLEN

visuals by: SHERRI BAKER

PFERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

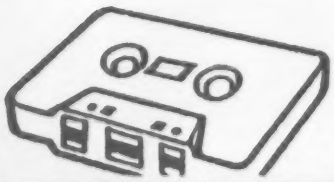
HOW TO FABRICATE INSET DOORS FOR CABINETS.

AND IN ORDER TO DO THIS YOU WILL NEED:

SAW	SCREWS
STEEL TAPE	SCREWDRIVER
HINGES	ROUTER
BIT	

WE WILL KNOW YOU CAN DO IT WHEN:

YOU HAVE CUT A DOOR TO FIT A CABINET OPENING AND HAVE INSTALLED THE HINGES. THE DOOR OPENS AND CLOSES WITHOUT STICKING.



A TAPE OF THIS MODULE IS AVAILABLE.

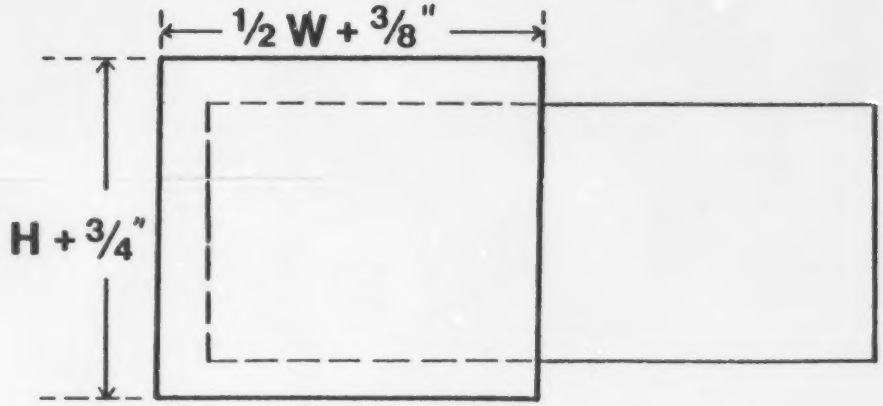
INFORMATION

CAUTION: BEFORE YOU USE ANY TOOLS, ESPECIALLY ELECTRIC, BE SURE THAT YOUR INSTRUCTOR OR ANOTHER STUDENT IS THERE TO HELP YOU. WEAR YOUR SAFETY GLASSES.

JOB STEPS

DOUBLE DOOR (FOR INSET DOORS 3/4 INCH)

1. MEASURE DOOR TO BE CUT. DOOR HEIGHT MUST BE 3/4 INCH (2 TIMES 3/8 INCH = 3/4 INCH) LONGER THAN OPENING OF CABINET.

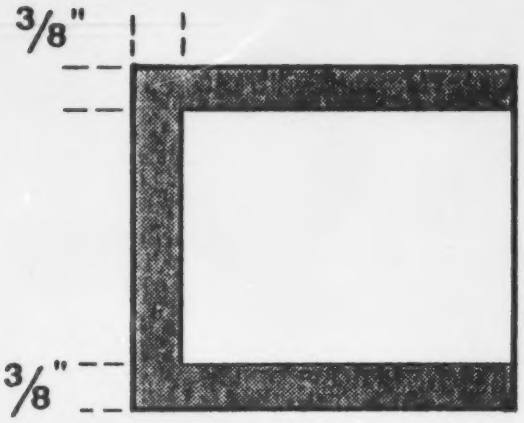


2. MEASURE DOOR WIDTH. MUST BE 3/8 INCH WIDER THAN HALF (1/2) THE TOTAL WIDTH OF CABINET OPENING.

3. CUT TWO DOOR PIECES WITH THE ABOVE MEASUREMENTS.

JOB STEPS

4. ROUT OUT 3/8 INCH DEEP AND 3/8 INCH WIDE ON THE TOP, BOTTOM, AND HINGE SIDE OF BOTH DOORS. THIS ALLOWS FOR THE OFFSET HINGE TO FIT.

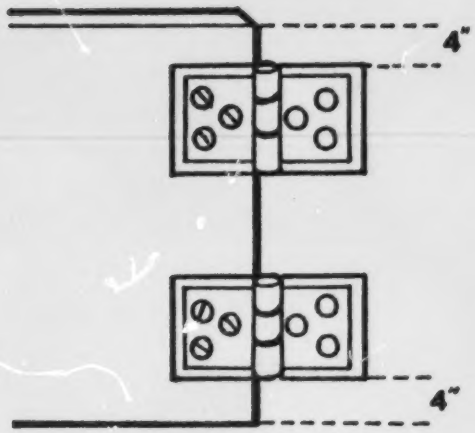


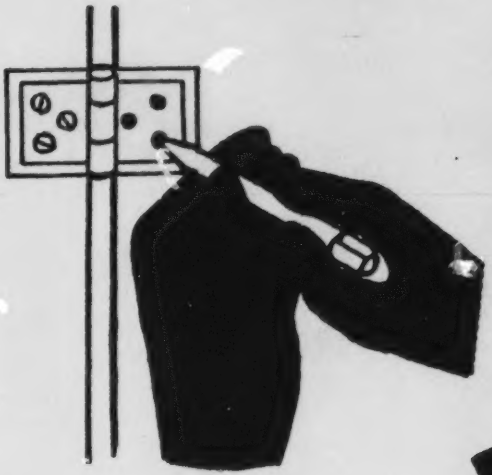
5. TRY DOORS IN OPENING BEFORE ATTACHING HINGES. SAND OR TRIM TO FIT.

6. USE ROUTER TO TRIM THE EDGES; TOP, BOTTOM, AND ONE SIDE.

JOB STEPS

7. ATTACH HINGES 4 INCHES DOWN FROM TOP AND 4 INCHES UP FROM BOTTOM.





8. CENTER PUNCH SCREW HOLES AND INSERT SCREWS IN TRIM AND DOOR.

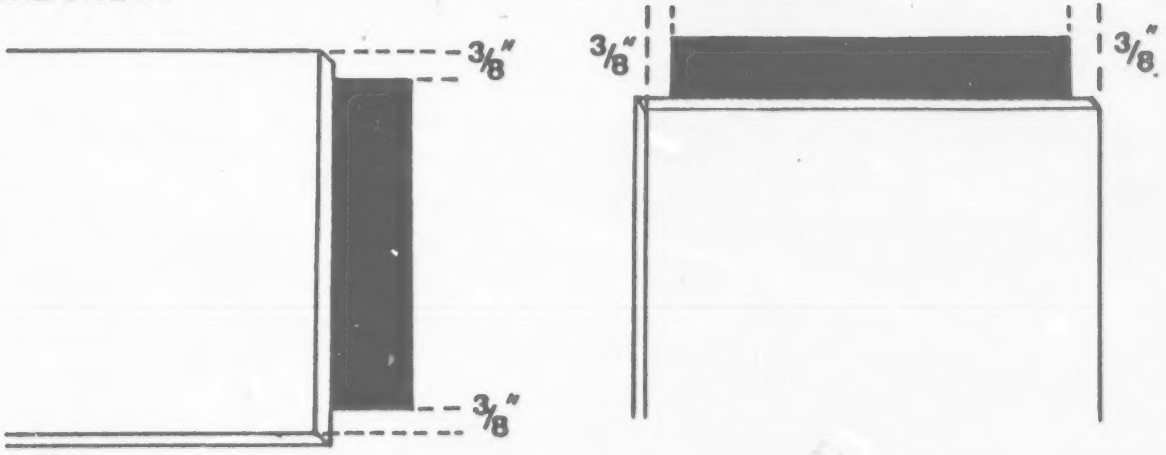
9. ADJUST TO OPEN AND CLOSE WITHOUT STICKING.

JOB STEPS

10. INSTALL MAGNETIC DOOR LATCHES. SEE INSTRUCTOR.

SINGLE DOOR

1. MEASURE DOOR TO BE CUT. DOOR HEIGHT MUST BE 3/4 INCH (2 TIMES 3/8 INCH = 3/4 INCH) LONGER THAN OPENING OF CABINET.

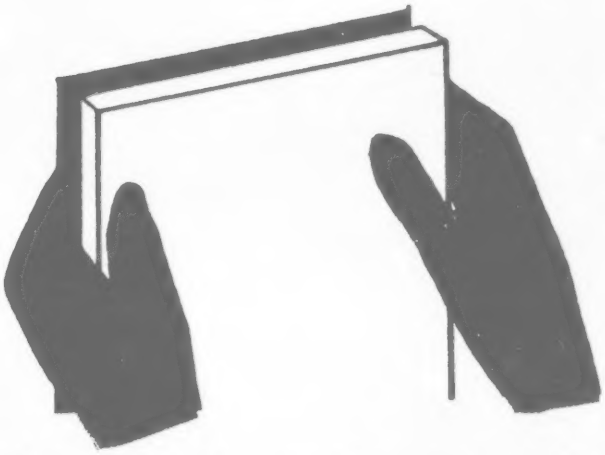


2. IF YOU ARE MAKING ONE DOOR TO COVER OPENING, THE DOOR MUST BE 3/4 INCH HIGHER AND WIDER THAN CABINET OPENING.

JOB STEPS

3. ROUT OUT 3/8 INCH DEEP AND WIDE ON THE TOP, BOTTOM, AND SIDES OF THE DOOR.

4. TRY DOOR IN OPENING BEFORE ATTACHING HINGES. SAND AND TRIM TO FIT.



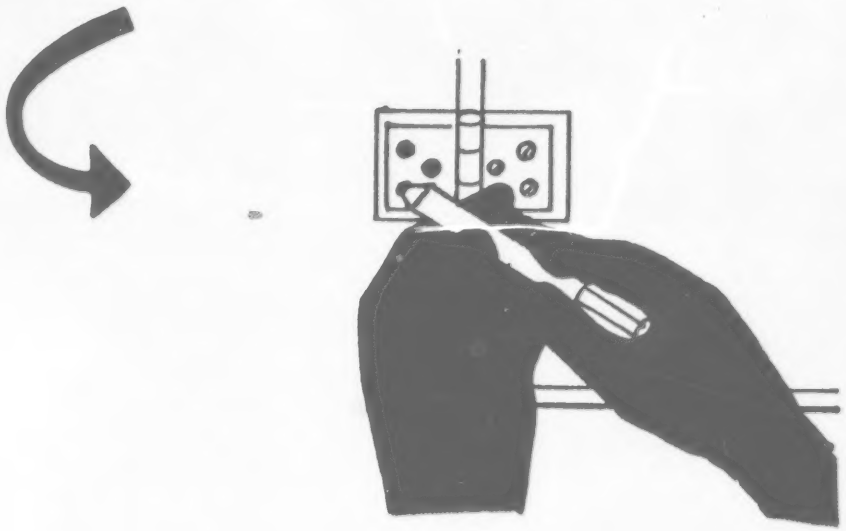
5. USE ROUTER TO TRIM THE EDGES; TOP, BOTTOM, AND BOTH SIDES.

6. ATTACH HINGES 4 INCHES DOWN FROM TOP AND 4 INCHES UP FROM BOTTOM.

TURN PAGE →

JOB STEPS

7. CENTER PUNCH SCREW HOLES AND INSERT SCREWS IN TRIM AND DOOR.



8. ADJUST TO OPEN AND CLOSE WITHOUT STICKING.

9. INSTALL MAGNETIC DOOR LATCHES. SEE INSTRUCTOR.

building maintenance & engineering

unit: CONSTRUCT CABINETS

capital area career center

module: 2201 21 007 7 date: 2/77 level: II

skill title: CABINET FINISHING

developed & written by: MIKE POLEN

visuals by: GLEN COOLEY

WORD GUIDE

FINISH - TO SAND AND PAINT OR VARNISH.

PERFORMANCE OBJECTIVE

YOU ARE GOING TO LEARN:

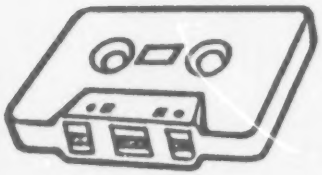
HOW TO FINISH A CABINET.

AND IN ORDER TO DO THIS YOU WILL NEED:

POWER SANDER
FINE & MEDIUM GRIT SANDPAPER
SANDING BLOCK
CLEAN RAG
FILLER
PUTTY KNIFE
STAIN OR URETHANE
PAINT THINNER

WE WILL KNOW YOU CAN DO IT WHEN:

THE CABINET SURFACE YOU HAVE FINISHED IS SMOOTH WITH NO MARKS OR SCRATCHES.



A TAPE OF THIS MODULE IS AVAILABLE.

WORD GUIDE

COUNTERSINK - PUSH ON SCREW BELOW SURFACE OF THE WOOD.

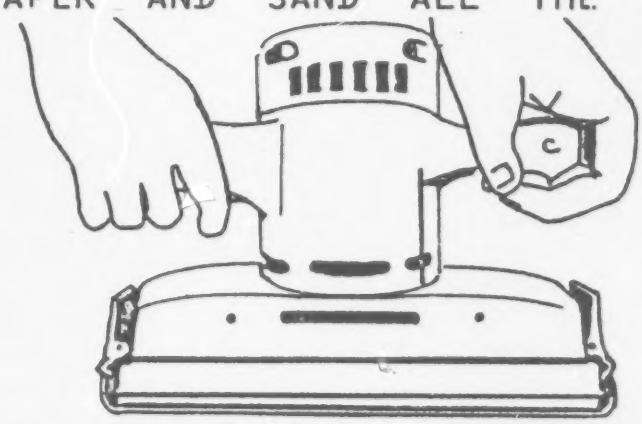
JOB STEPS

1. COUNTERSINK ALL SCREWS AND NAILS TO 1/16 INCH BELOW THE WOOD SURFACE.

2. FILL ALL NAIL AND SCREW HOLES AND DEEP SCRATCHES WITH PLASTIC WOOD FILLER LEVEL WITH SURFACE.

3. LET DRY.

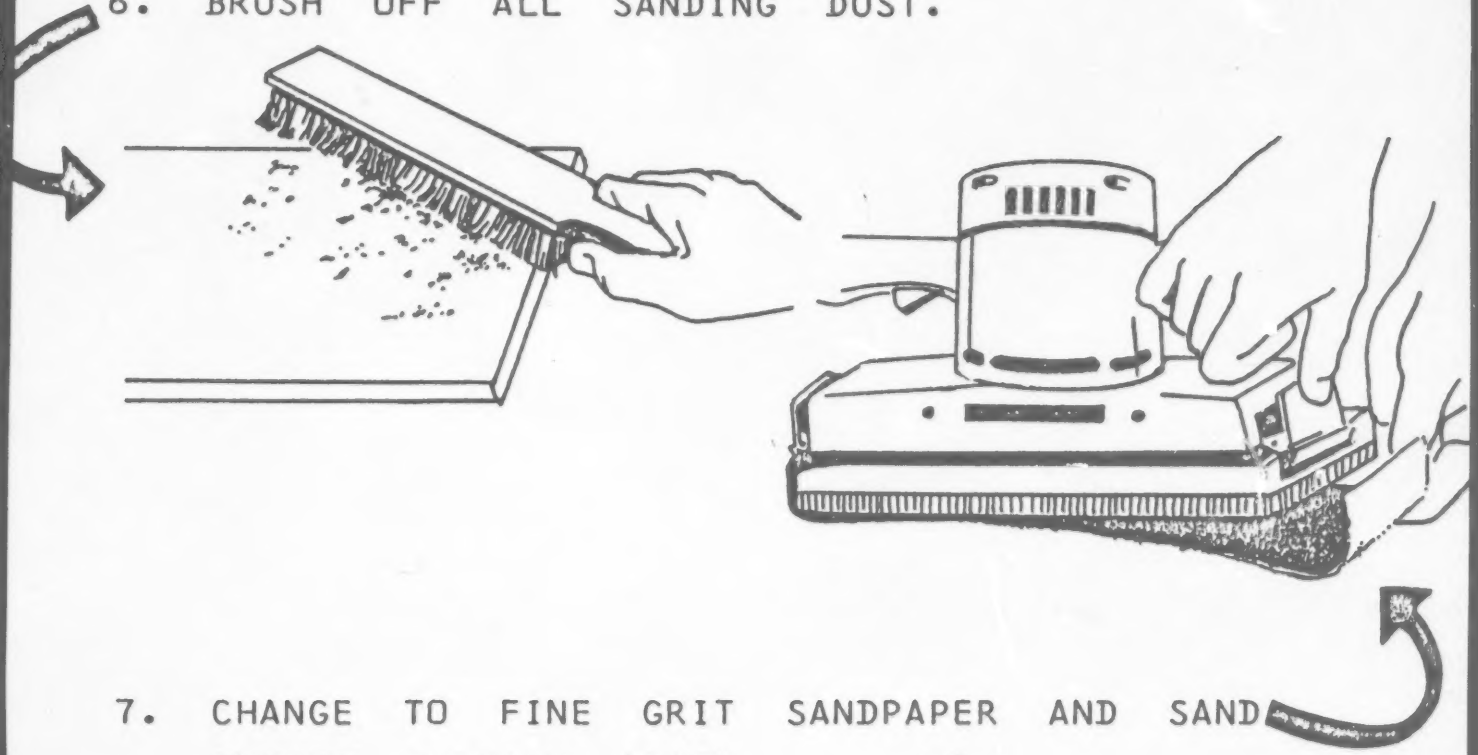
4. USE POWER SANDER WITH MEDIUM GRIT SANDPAPER AND SAND ALL THE SURFACE.



JOB STEPS

5. CHECK SURFACE FOR ANY SCRATCHES OR ROUGH SPOTS MISSED. REPEAT JOB STEP 4 IF NEEDED.

6. BRUSH OFF ALL SANDING DUST.



7. CHANGE TO FINE GRIT SANDPAPER AND SAND ENTIRE SURFACE AGAIN.

JOB STEPS

8. BLOW OFF THE DUST FROM THE SURFACE WITH AN AIR HOSE.

9. MOVE CABINET TO THE PAINT AREA. DAMPEN A CLEAN RAG WITH PAINT THINNER AND WRING OUT THE EXCESS.

10. WIPE ENTIRE SURFACE TO REMOVE FINE DUST.

11. FOR A NATURAL FINISH, GO TO STEP 12. FOR OTHER THAN A NATURAL FINISH APPLY A STAIN EVENLY OVER ENTIRE SURFACE AND LET DRY (READ DIRECTIONS ON CONTAINER).

TURN PAGE →

JOB STEPS

12. APPLY FIRST COAT OF URETHANE AND LET DRY (SEE DIRECTIONS ON CONTAINER).

13. IF FINISH IS ROUGH, RUB THE SURFACE LIGHTLY WITH FINE STEEL WOOL.

14. APPLY LAST COAT OF URETHANE.